

## James Madison University JMU Scholarly Commons

---

Senior Honors Projects, 2010-current

Honors College

---

Spring 2019

# Intimacy idolization and ego development in adolescence: Links to social relationships and wellness in early adulthood

Rachel Brown

Follow this and additional works at: <https://commons.lib.jmu.edu/honors201019>

 Part of the [Developmental Psychology Commons](#)

---

### Recommended Citation

Brown, Rachel, "Intimacy idolization and ego development in adolescence: Links to social relationships and wellness in early adulthood" (2019). *Senior Honors Projects, 2010-current*. 654.  
<https://commons.lib.jmu.edu/honors201019/654>

This Thesis is brought to you for free and open access by the Honors College at JMU Scholarly Commons. It has been accepted for inclusion in Senior Honors Projects, 2010-current by an authorized administrator of JMU Scholarly Commons. For more information, please contact [dc\\_admin@jmu.edu](mailto:dc_admin@jmu.edu).

Intimacy Idolization and Ego Development in Adolescence:  
Links to Social Relationships and Wellness in Early Adulthood

---

An Honors College Project Presented to  
the Faculty of the Undergraduate  
College of Health and Behavioral Sciences  
James Madison University

---

by Rachel C. Brown

May 2019

---

---

Accepted by the faculty of the Department of Psychology, James Madison University, in partial fulfillment of the requirements for the Honors College.

FACULTY COMMITTEE:

---

Project Advisor: David E. Szewedo, Ph.D.  
Assistant Professor, Psychology

---

Reader: Krisztina V. Jakobsen, Ph.D.  
Associate Professor, Psychology

---

Reader: Claire Lyons, Ph.D.  
Professor, Psychology

HONORS COLLEGE APPROVAL:

---

Bradley R. Newcomer, Ph.D.,  
Dean, Honors College

---

---

PUBLIC PRESENTATION

This work is accepted for presentation, in part or in full, at Psychology Departmental Symposium on April 22<sup>nd</sup>, 2019.

**Table of Contents**

Acknowledgements	5
Abstract	6
Introduction	8
Methods	17
Results	21
Discussion	26
References	33
Tables	39
Figures	46

## List of Figures

### Tables

1. Descriptive statistics and correlations	39-40
2. Hierarchical regressions: reliable alliance and satisfaction	41
3. Hierarchical regressions: intimacy and support	42
4. Hierarchical regressions: dominance and punishment	43
5. Hierarchical regressions: romantic appeal, social acceptance, happiness, and deviant friendships	44
6. Hierarchical regressions: job satisfaction, promotions, work performance, and functional independence	45

### Figures

1. Interaction: ego development, romantic intimacy, reliable alliance	46
2. Interaction: ego development, romantic intimacy, reliable alliance	47
3. Interaction: ego development, romantic intimacy, friendship satisfaction	48
4. Interaction: ego development, romantic intimacy, relationship support	49
5. Interaction: ego development, romantic intimacy, relationship punishment	50
6. Interaction: friendship alliance reliability, relationships alliance reliability, romantic appeal	51
7. Interaction: friendship alliance reliability, relationships alliance reliability, social acceptability	52
8. Interaction: friendship alliance reliability, relationships alliance reliability, happiness	53
9. Interaction: friendship alliance reliability, relationships alliance reliability, deviant friends	54
10. Interaction: friendship alliance reliability, relationships alliance reliability, job satisfaction	55

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

11. Interaction: friendship alliance reliability, relationships alliance reliability, promotions	56
12. Interaction: friendship alliance reliability, relationships alliance reliability, work performance	57
13. Interaction: friendship alliance reliability, relationships alliance reliability, functional independence	58

### **Acknowledgements**

I would like to express my deepest gratitude to any and all who played a part in my completion of this thesis. Namely, Dr. David Szwed, I thank you for all the knowledge and experience you have shared with me throughout the duration of this endeavor, it has allowed me to grow tremendously. Your patience and humility have provided me new levels of understanding '*perseverance*'. To Dr. Krisztina Jakobsen and Dr. Claire Lyons I cannot thank you enough for serving on my committee. The time you took to provide insightful, intentional feedback and encouraging support was both extremely valued, and critical to the completion of this work.

### **Abstract**

This study aims to examine the interplay between ego development and intimacy development as predictive of later friendship and romantic relationship quality. It subsequently seeks to understand how balance and imbalances in friendship and romantic relationship quality, predicted by ego and intimacy development, are indicative of later markers for overall wellness. As such, adolescent reports of ego development and romantic intimacy were examined in relation to later reports of reliable alliance in both a close friendship and a romantic relationship. Ego development was predicted to be associated with higher levels of close friendship stability and lower levels of romantic stability; inversely, romantic intimacy was predicted to be associated with higher levels of romantic stability and lower levels of close friendship stability. Having both higher levels of close friendship and romantic stability in young adulthood was predicted to be most strongly associated with reports of adult wellness measured via markers including job satisfaction, work performance, functional independence, happiness, and time spent with deviant peers. However, in the context of stability imbalances, it was predicted that higher close friendship stability (in the context of lower romantic stability) would predict greater wellness as compared to higher romantic stability (in the context of lower close friendship stability). Mutli-reporter data were obtained from 184 teens at ages 18, 21, and 22. Higher ego development predicted significantly lower reports of reliable alliance in romantic relationships. Higher ego development also predicted that the teen was the more dominant one in the relationship. Higher intimacy was shown to negatively correlate with friendship reliable alliance, friendship satisfaction, and friendship intimacy. Higher romantic intimacy also predicted the teens' romantic partner as being more dominant in the relationship. There were also a number of significant interactions between ego development and romantic intimacy, largely suggesting an

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

influential role of romantic intimacy in the context of low, but not high, ego development.

Finally, interactions between friendship stability and romantic stability to predict a number of wellness outcomes in adulthood suggest how various domains may be impacted by one's earlier experiences with these relationships. Limitations and implications of the findings are discussed.



### **Intimacy Idolization and Ego Development in Adolescence:**

#### **Links to Social Relationships and Wellness in Early Adulthood**

Understanding how certain characteristics and tendencies develop during adolescence is essential for predicting how youth may develop into happy, healthy, and successful adults. This is why developmental theorists like Erik Erikson spent their lives trying to organize and explain the developmental stages of children, teens, and adults and similarly why research is still focused on clarifying these same processes today. For example, Jones, Greenberg, and Crowley (2015) were recently interested in studying how different “non-cognitive traits” (like self-discipline, academic motivation, and interpersonal skills) in kindergarten-aged children predict future behavior and wellness, finding that overall, prosocial skills and high levels of social competence in early childhood were significant predictors of wellness in a variety of domains in adulthood. The present study is similarly motivated to analyze and clarify some of the many nuances of development from adolescence to early adulthood through examination of identity and intimacy and their implications on the quality of future social and romantic relationships, and further how these relationships may in turn predict adult overall wellness.

#### **Ego and Identity Development**

Constructs like “ego” and “identity” are both fluid and abstract. There are a number of different ways to think about what it means to know yourself, and what it looks like getting there. As such, there are an abundance of theories across the biopsychosocial spectrum regarding individual development that seek to understand and explain this process. For the purpose of this study, Erik Erikson’s psychosocial stages are considered process that may be useful for framing an understanding of adolescent development. Erikson’s model suggests that individual’s develop in eight broad stages that 1) should occur in an ordered succession, though 2) never officially

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

“start or end” but rather continue across the *life-span* constantly echoing and projecting backwards and forwards in an intertwined fashion of continuity (Knight, 2017.) These ideas influenced the development of the present study’s hypotheses. Following Erikson’s life-span emphasis and stage procession ideas, this study adopts his definition of *ego* as the “positive force that creates a self-identity serving as an individual’s ability to unify experiences and actions in an adaptive manner” (Erikson: Post-Freudian, n.d.)

Encapsulated in Erikson’s stages of development is the idea that *ego and* intimacy development are processes essential positive growth. Indeed, research has shown that obtaining high quality, intimate relationships is an important aspect of development for emerging adults reported by most as an integral piece of their overall happiness and health (Umberson & Montez, 2010). While the importance of these relationships may be clear, the means by which they become more attainable based on adolescent developmental processes are less evident. According to Erikson, achieving a confident sense of identity is what builds the foundation from which mature forms of intimate relationships develop. Erikson’s theories suggest that identity development equates to removing one’s fear of suffering “ego loss” (losing one’s subjective sense of self) in the context of others, which is an imperative task for developing adults to achieve *prior* to their attempts at fostering intimate relationships.

This Eriksonian idea of successive stages where identity achievement should precede interpersonal intimacy for proper development has recently sparked a discussion among researchers and scholars with propositions made that the ordering has become “taken for granted” and subsequent suggestions that some adolescents may actually experience a sort of normal degree of variation in their developmental tasks (Arnett, 2004). Beyers and Seiffge-Krenke (2010) attempted to support this claim with their study arguing that intimacy in modern

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

society can develop before identity during adolescence (with different individuals varying in the timing of their intimacy and identity development) without any negative consequences for the teen. While this seems to make theoretical sense – that developmental paths may vary in ways unique to the individual and their experiences-- there were no significant findings in favor of this argument resulting from their extensive analyses. Inversely, their study's findings actually provided further support for Erikson's theories on both the ordering, and implications of ego (first) and intimacy(second) development through a longitudinal analysis. A number of other studies yielded a variety of similar results suggesting importance of intimacy development following identity (Dyk & Adams, 1990; Kacerguis & Adams, 1980; Rosenthal, Gurney & Moore, 1981, Zimmer-Gembeck & Petherick, 2006).

While there is, as mentioned, a substantial body of research aimed at testing the strength of direct connections of intimacy-following-identity developmental processes, there is also a notable amount of research aimed at taking into account other developmental related experiences like goal setting, sexual activity/desire, sexual orientation, sex, gender, maturity, culture, race, and assessing their effects on how important ego-leading development is within varying context. (Bilodeau & Renn, 2005; Côté & Levine, 1987; Paul & White, 1990; Sanderson & Cantor, 1995; Schiedel & Marcia, 1985). This research yields much more ambiguous results than Beyers and Seiffge-Krenke (2010) finding significant support for a degree of uniqueness and individual circumstance in “normal” developmental trajectories serving as a prop keeping the door open on just how “natural” Erikson's ideas about ordered development really are.

This uncertainty of how the various nuances of adolescent development interact with and influence adult outcomes motivated the premise of the present study. The aim is to further investigate how ego and intimacy development may have differential impacts on subsequent

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

relationship development, and how such relationship development may in turn influence future markers of adult wellness. Moreover, it seeks to examine the possibility that ego development preceding intimacy provides, generally, the best circumstances for an individual's future well-being, allowing for the most efficiently developed and effectively maintained social and romantic relationships later in life, eventually boosting one's overall wellness.

### **Friendships and Romantic Relationships**

Successful development and maintenance of high quality social relationships is frequently emphasized as another critical marker for determining positive outcomes for individuals. Mental and physical health, risk of mortality, and negative health-related behaviors are all found to be highly influenced by one's social relationships (Umberson & Montez, 2010). Thus, an individual's level of available social support has both short and long-term effects on a number of different aspects related to their well-being (Goodenow, Reisine, & Grady, 1990; Ristau, 2011; Umberson & Montez, 2010; Wilcox 1981). In one influential study of the specific "ingredients" linked to forming these positive social relationships, results indicated that ego development was a significant predictor of adolescent *intimate* behavior (quality of friendship), adolescent *attachment* to peers (friendship security), and changes in *popularity* (Marsh, Allen, Ho, Porter, & McFarland, 2006). This highlights that adolescents with higher reports of ego development were more likely, on a broad spectrum of traits, to have better social relationships as compared to those adolescents with lower levels of ego development.

When reviewing the research aimed at answering questions of ego development and intimate exchanges in adolescence and how/why those developmental markers are important, one can see a variety of combinations unfold. It appears that in an ideal adolescent, time spent getting to know oneself (developing a strong ego) will later influence strength in friendships. Further,

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

the positive practice of interpersonal exchange between friends suggests increased intimacy in romantic contexts, leading to high social support all around to predict the most “well-adjusted” happy, healthy adult. This layered look on the developmental process supports the previously introduced idea that some degree of ordering is beneficial to these tasks. Additionally, however, a second trend appears upon closer analyses, unveiling the potential importance of a degree of balance within and between developmental traits alongside their sequencing.

When considering the importance of strong ego development as a ground zero for healthy maturation, it follows to acknowledge the possibility of “too much of a good thing.” While existing research *does* point to ego development as necessary and beneficial for interpersonal relationships, it is nonetheless a concept rooted in self-centered processes. As such, there are different levels within one’s ego “development” that have varying consequences on relationships (Hennighausen et al., 2004.) It appears that within the task of creating an identity there is a pitfall whereby the inability to move from the early-ego-stages of egocentrism and external control can impede one’s progression to late-ego-stages of diversity appreciation and internal control (Hauser, 1991). Conversely, more precocious ego development at the extremely high level during adolescence, which may be categorized by high levels of confidence and emotional expressivity, may present equally troublesome challenges in varying relationship contexts.

Ego then isn’t a one-stop-shop for healthy developmental trajectories. It matters how extreme you score on both ends of the measure. Too little, or too much, and the way your relationships are helped or hindered changes. Not all relationships are created equal in this hypothesis though, and questions of trait levels on relationship quality urges additional consideration of context.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Where adolescent romantic relationships are often marked as unstable and frequently changing, friendships at this age are contrastingly categorized as stable, and longer lasting (Allen, Narr, Kansky, & Szwed, 2019). The differences in shelf life and consistency of relationship type influenced the current study to question how the aforementioned pitfalls and success of ego development would manifest differently depending on what type of relationship was assessed. Past demonstration of nonromantic close friendships stability (Allen, Narr, Kansky, & Szwed, 2019) was used in the current study as evidence to suggest that when an individual falters in the ideal “amount” of age-appropriate ego these relationships would suffer less quality decreases as a result. Where the nature of instability and flux in early-to-mid adolescent romantic relationships (Allen, Narr, Kansky, & Szwed, 2019) would in contrast serve as much more unforgiving, suffering the most from over present ego.

Given that intimate romantic partnerships in adulthood are part of being happy, healthy, and successful for many individuals, much research on this topic has aimed to examine what adolescent factors may predict the quality of these romantic relationships. One study by Demir (2008) showed support for an Eriksonian ordering of trait development as a predictor of quality romantic relationships with results of his study finding that emotional security and companionship were the strongest features of successful romantic relationships, with identity formation serving as a moderating factor for determining happiness in the relationship. In other words, the happiest, most intimately committed individuals were those with a strongly developed identity and solid sense of self.

Although many individuals may desire to be a part of a romantic relationship, not every person emerging into adulthood may want an intimate partner. Some individuals report extremely low levels of interest in and optimism about their romantic expectations. These

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

outliers, reporting no desire for such fulfillment are of particular interest to developmental psychologists who, as Erikson likely would, wonder why this sort of “natural next step” in development is of no interest to some. Research on this subset of individuals has found that young adults who reported no desire for romantic relationships, and who hold no perceivable optimism for success in intimacy scored very low on measures of ego development as compared to their intimacy driven peers (Yasumasa, 2013.) These findings suggest that ego development not only boosts success in romantic relationship, but can actually, when underdeveloped, dissipate one’s perception of their necessity entirely.

### **Overall Wellness**

While the research reviewed above highlights connections between ego development (having a strong sense of self) and intimacy on relationships, there is also interest in what specific benefits these relationships may provide. Gadermann et al. (2016) looked at the extent to which positive social relationships could serve as a mediator for other variables that have been recognized as markers for negative adolescent outcomes. They hypothesized that various associations between income, health, and life satisfaction would be mediated by positive reports of social support. Their results showed significant backing for this with peer relationships and – self-reported “belonging” serving as 1) the strongest predictor of life satisfaction, 2) a mediator between income and life satisfaction, *and* between income and health, and 3) as predictor of positive child health reports at large. Thus, social relationships have important implications for positive life outcomes, and importantly, ego development can help promote both the acquisition and maintenance of these relationships.

A strong sense of self (ego) has been shown to set an individual’s developmental trajectory towards levels of healthy intimacy in social settings, and later in romance, and while

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

all these variables interact in broader outcomes (happy/healthy life), ego development and the social competency required to foster friendships stand out as the key factors in this equation. A recent study found that on several categories related to “overall wellness” (education, employment, crime, substance abuse, mental health, etc.), individuals who displayed greater levels of social competence (which can be recognized as catalyzed by ego development) at kindergarten age reported more positive levels in each “wellness category” (Jones, Greenberg, & Crowley, 2015). Additional support for similar claims can be found in research conducted by Lin, Liebert, Tan, Lau, & Salles (2016) with the overall well-being of young adults (not burning out, less emotional disturbance, more effective emotion regulation) correlating with emotional intelligence (e.g., social competence). Further, similar findings in a study on university students’ abilities to cope with stress showed that coping levels were most significantly affected by self-esteem and social support, with the interaction correlating with overall general health reports as wellness (Yildirim, Karaca, Cangur, Acikgoz, & Akkus, 2017).

Similar research focused on studying these effects in different populations all find relatively similar results, presenting successful ego development and one’s social support as precedent-setting developmental variables that allow for intimacy and romance, all of which taken together predict the best individual outcomes (Cowen, 1994). This can be found for rural men (Kutek, Turnbull, & Fairweather-Schmidt, 2011), veterans at risk for depression and PTSD (Painter, Gray, McGinn, Mostoufi, & Hoerster, 2016), and various other individuals of all ages and statuses experiencing life’s stressors (Granello, 2001).

### **Hypotheses**

The research reviewed above highlights some of the effects one’s overall well-being endures as a result of both intra and interpersonal experiences. Although questions remain about



## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

the importance of a sequential ordering of ego *then* intimacy development, this study examines the importance of these constructs from a slightly different perspective. It first seeks to understand the predictive value of these constructs, both individually and conjointly, for the stability and quality of future friendships and romantic relationships, with a particular interest in how imbalances in their development (i.e. having higher levels of one but lower levels of another) might affect such outcomes. Next, it aims to examine how stability in such relationships might be related markers of adult wellness, again with an interest in how balances vs. imbalances might be important to consider. Thus, this study hypothesizes that:

1. Adolescents who demonstrate higher levels of ego development at age 18 will report lower quality romantic relationships at age 21, but will report higher quality friendships at age 21.
2. Adolescents who demonstrate higher levels of intimacy in romantic relationships at age 18 will report lower quality friendships at age 21, but will report higher quality romantic relationships at 21.
3. There will be interactions between ego development and romantic intimacy such that:
  - a) Friendship quality will be greater when ego development is high and romantic intimacy development is low
  - b) Romantic quality will be greater when romantic intimacy is high and ego development is low.
4. Adolescents who report both higher quality friendships and higher quality romantic relationships at age 21 will have higher scores on multiple measures of adjustment at age 22 as compared to those who do not.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

5. When imbalances between friendship and romantic quality exist, higher friendship quality in the context of lower romantic quality will predict higher scores on multiple measures of adjustment at age 22 as compared to higher romantic quality in the context of lower friendship quality.

### **Method**

#### **Participants and Procedures**

This report is drawn from a larger longitudinal investigation of adolescent social development in both familial and peer contexts. Participants included 184 adolescents (86 males and 98 females), their parents, their romantic partners, and their closest friends assessed across a 5-year period. The sample was racially/ethnically and socioeconomically diverse; of the participants, 58% identified themselves as Caucasian, 29% as African-American, and 13% as being from other or mixed ethnic groups. Adolescents' mothers reported a median family income in the \$40,000 to \$59,999 range during the first year of the study, which was comparable to the national median family income of \$53,350 in 1997, the year of initial data collection (U.S. Bureau of the Census, 2010). Eighteen percent of the sample reported annual family income less than \$20,000, and 33% reported annual family income greater than \$60,000. The sample appeared comparable to the overall population of the school from which it was recruited in terms of racial/ethnic composition (42% non-White in sample vs. ~ 40% non-White in school) and comparable to the socioeconomic status of the larger community (mean household income=\$43,618 in sample vs. \$48,000 in the community at large).

Participants were initially recruited via mailing to all parents of students in the 7th and 8th grades of a single middle school along with follow-up contact efforts at school lunches. Adolescents who indicated they were interested in the study were contacted by telephone. Of all

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

students eligible for participation, 63% agreed to participate either as target participants or as peers providing collateral information. Adolescents provided informed assent, and their parents provided informed consent before each assessment (until participants were old enough to provide informed consent themselves). The same assent/consent procedures were used for best friends. Interviews took place in private offices within a university academic building. Adolescents, mothers, and peers were all paid for their participation. Participant data was protected by a Confidentiality Certificate issued by the U.S. Department of Health and Human Services, which further protects information from subpoena by federal, state, and local courts. If necessary, transportation and childcare were provided to participants

Target teen participants first completed a questionnaire to assess their ego development at age 18. At age 18 teens who were in a romantic relationship were also invited to bring their romantic partner to the study offices to complete an 8-minute interaction task. This task required the teen to express a need for help or support with problem to their romantic partner. The interaction was coded for a number of behaviors, including the level of intimacy displayed during the context of the task. Teens were re-assessed at age 21 on measures of friendship and romantic relationship quality. Teens' best friends and romantic partners were also invited to complete the same measures of friendship or romantic relationship quality with the target teen at that time. Finally, at age 22, teens' best friends and mothers were asked to rate the teens' adjustment on a series of markers of wellness in adulthood.

### Measures

**Ego Development.** At age 18 participants were given a Sentence Completion Test (SCT) to assess overall levels of Ego Development. The SCT is a 14 item self-report measure in which participants were asked to complete open ended sentences such as, "*when a child will not join in*

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

*group activities...*” and *“rules are...”* The SCT given to participants was a slightly shorter, modified version of Loevinger & Wessler’s (1978) original version. Chronbach alpha analyses were used to match up the items given to participants with items on the original SCT to ensure the sentences used to prompt participants were those that have been most highly correlated with total Ego Development scores. Responses were coded using the “measuring Ego Development: Second Edition,” 1996 guidelines to calculate levels of perceived Ego Development.

**Intimacy.** At age 18 adolescents participated in an observed 8-min Supportive Behavior Task (SBT) with their romantic partner during which they asked for help with a “problem they were having that they could use some advice or support about.” These interactions were coded using the Supportive Behavior Coding System (Allen et al. 2001). Intimacy scores were based on combined scales which included teens’ call for emotional support (Intraclass  $r = .86$ ) and emotional support given by the romantic partner ( $r = .81$ ), teen ( $r = .56$ ) and romantic partner  $r = .65$ ) self-disclosure, and teen ( $r = .91$ ) and romantic partner ( $r = .92$ ) talk about 3<sup>rd</sup> persons (i.e. mutual acquaintances).

**Friendship and Romantic Relationship Quality.** At age 21, participants were given the Network of Relationships Inventory (NRI) to assess the quality of their relationship(s) with best friend or romantic partner. The NRI consists of 15 scales that are scored on a 5-point Likert scale ranging from “1=little or none” to “5=the most”.The reliability and validity of this measure were supported through tests run by Furman & Buhrmester (1995.) *Satisfaction, Support, Punishment* and *Reliable Alliance* for both friendships and romantic relationships were assessed from the teens’, best friends’, and romantic partners’ perspectives. These same qualities were also assessed via the NRI at age 18 for romantic relationships in order to control for baseline relationship quality. Because the NRI was not available at age 18 for friendships, the Total

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Friendship Quality scale from the Friendship Quality Questionnaire (Parker & Asher, 1993) was used as a baseline measure of friendship quality ( $\alpha=.89$ )

**Overall Wellness.** At age 22 participants were assessed using the Young Adult Adjustment Scale (YAAS) created by Capaldi, King, and Wilson (1992). The YAAS measures various constructs on an ad hoc basis asking respondents to answer a number of items on a 5-point Likert scale ranging from not true (1) to very true (5.) Items on the YAAS are organized under 10 subscales. For this study the YAAS was administered to the teens' mother and best friend for them to report about the teen. For this study teen's level of Happiness ( $\alpha=.84$ ), time Teen Spends with Deviant Peers ( $\alpha=.70$ ), Teen's Work Performance ( $\alpha=.83$ ), Teen's Job Satisfaction ( $\alpha=.83$ ), Teen's Workplace Promotion(s), and Teen's Functional Independence ( $\alpha=.86$ ) were the subscales pulled from the larger measure.

For additional measures of the teen's general adjustment at age 22, subscales from Messer and Harter's (1986) Adult Self-Perception Profile were used. This measure is an extension of the Self-Perception Profile for Children (Harter, 1985) and the Self-Perception Profile for Adolescents (Harter, 1988). Participants are asked to choose between two contrasting stem items and then rate that item as either "sort of true" or "really true" about themselves. This results in a four point scale for each item. Appropriate items are reverse coded, such that higher scores represent higher levels of the construct (e.g., a "4" would represent high self-worth, while a "1" would represent low self-worth). Oblique rotation factor analyses support the validity of the Adult-Self Perception Profile, alongside a high report of internal consistency backing the measure's reliability. The subscales of interest from this measure were Social Acceptance ( $\alpha=.85$ ) and Appeal. ( $\alpha=.76$ )

## Results

### Preliminary Analyses

**Univariate and Correlational analyses.** Means and standard deviations for all primary variables are presented in Table 1. For descriptive purposes, correlations were examined between all key variables of interest and are also presented in Table 1. Initial analyses show that gender and family income have significant association with several of the primary variables. Income positively correlated with ego development ( $r = .18, p < .05$ ), intimacy ( $r = .25, p < .05$ ), and romantic appeal ( $r = .19, p < .05$ ). Gender had significant positive correlations with punishment ( $r = .29, p < .01$ ) indicating that females were more likely to score higher on this measure, indicating more “punishment” from romantic partner. Additionally, gender was found to significantly correlate negatively with deviant friendships ( $r = -.23, p < .01$ ), and workplace promotions ( $r = -.21, p < .01$ ) indicating that males were more likely to score highly for these outcomes as compared to females. Both demographic variables were included as covariates in all regression analyses to account for any possible effects that may not have reaches conventional levels of statistical significance.

Preliminary analyses also investigated possible associations between predictors and outcomes. Adolescent ego development (age 18) had a significant negative correlation with romantic partner’s reports of reliable alliance from teen in relationships at ages 21 ( $r = -.31, p < .01$ ). Reports of adolescent intimacy (age 18) were also found to negatively correlate with workplace promotions at age 22 ( $r = -.30, p < .05$ ). Interestingly, there were no other significant correlations between ego development and intimacy and relationship quality variables, nor between relationship stability (i.e., reliable alliance) variables and wellness outcomes.

### Primary Analyses

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

**Hypothesis 1.** *Adolescents who demonstrate higher levels of ego development at age 18 will report lower quality romantic relationships at age 21, but will report higher quality friendships at age 21.*

Regression analyses first investigate the direct impact of ego development on relationship quality. Gender and income were entered as covariates in all models. Ego development at age 18 was found to negatively impact partner reports of reliable alliance in romantic relationships at 21 ( $\beta = -.28, p \leq .001$ ) as well as teen's report of partner dominance the relationship ( $\beta = -.23, p \leq .01$ ). However, there were a number of relationship qualities (both friendships and romantic relationships) that saw no direct effect from the reported level of ego development at 18 (see Tables 2-4).

**Hypothesis 2.** *Adolescents who demonstrate higher levels of intimacy in romantic relationships at age 18 will report lower quality friendships at age 21, but will report higher quality romantic relationships at 21.*

Next, analyses examined teen intimacy reports at age 18 as predictive of relationship quality at 21. Higher adolescent intimacy was shown to negatively affect reports of reliable friendship alliance from both the perspective of the teen ( $\beta = -.49, p \leq .001$ ) and the best friend ( $\beta = -.45, p \leq .01$ ). Best friend's report of satisfaction with the friendship was negatively impacted by higher intimacy reports ( $\beta = -.40, p \leq .01$ ) as well as the teen's report of intimate interactions within the friendship ( $\beta = -.32, p \leq .01$ ). Lastly, there was an increase in teen's reports of the best friend being a dominant presence in the friendship at 21 with higher intimacy interest at 18 ( $\beta = .23, p \leq .05$ ). Again, gender and income were entered as covariates in all models (see tables 2-4).

**Hypothesis 3.** *There will be interactions between ego development and romantic intimacy such that:*

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

**a)** *Friendship quality will be greater when ego development is high and romantic intimacy development is low,*

**b)** *Romantic quality will be greater when romantic intimacy is high and ego development is low.*

Regression analyses examined interactions between ego development and intimacy at age 18 and relationship quality at age 21. All analyses included: gender and income as covariates, either friendship quality or romantic relationship satisfaction at age 18 as a baseline control variable, and the interactions between ego and intimacy development as predictors of relationship quality variables at age 21. Interaction variables were created by standardizing ego development and adolescent intimacy and multiplying them together.

*Friendship Quality.* Results from the regression analysis between ego and intimacy on reports of reliable alliance in friendships indicate that teens who have low ego and high intimacy report lower reliable alliance in their friendships compared to those teens with low ego and low intimacy ( $\beta = .37, p \leq .01$ , Figure 1). Comparably, the best friend's perception of reliable alliance in the friendship indicated that teens with lower developed ego and higher romantic intimacy were less reliable friends compared to those with lower developed egos and low romantic intimacy ( $\beta = .33, p \leq .05$ , Figure 2). Finally, significant results from the effects of ego and intimacy on best friend's reports of satisfaction with friendships indicated a similar pattern to that above: teens with lower developed ego and higher romantic intimacy were less satisfied in the friendship compared to those with lower developed egos and low romantic intimacy ( $\beta = .32, p \leq .01$ , Figure 3). Interestingly, there were virtually no differences in any of these outcome variables based on intimacy level when ego development was higher.



## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

*Romantic Quality.* Significant results from the interaction between ego, intimacy, and romantic support indicate that youth with lower ego development report more perceived support from their romantic partners at 21 when they report greater romantic intimacy as compared to youth with lower romantic intimacy ( $\beta = -.26, p \leq .05$ , Figure 4). Interestingly, additional analyses of romantic quality as assessed by the interaction of ego, intimacy and partner reports of perceived punishment yielded a similar pattern of results. This interaction shows that when dating a partner with reportedly low ego development, high intimacy predicts significantly elevated levels of punishment at the hands of that partner compared to low intimacy ( $\beta = -.40, p \leq .01$ , Figure 5).

**Hypothesis 4.** *Adolescents who report both higher quality friendships and higher quality romantic relationships at age 21 will have higher scores on multiple measures of adjustment at age 22 as compared to those who do not.*

Following the same approach described to test the previous hypotheses, regressions were conducted to examine the extent to which relationship stability with friends and romantic partners at age 21 could predict various markers of overall wellness at age 22. Gender and income remained covariates and interaction variables were created by standardizing reliable alliance of friendships and reliable alliance of romantic relationships and multiplying them together.

### *Romantic Appeal*

Adolescents who had highly reliable friendships and highly reliable romantic relationships at 21 reported the highest self-report of their romantic appeal compared to all other combinations of relationship quality ( $\beta = .23, p < .05$ , Figure 6),

### *Deviant Friendships, Workplace Performance, and Functional Independence*

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

In line with hypotheses, mothers of adolescents who reported both highly reliable friendships and highly reliable romantic relationships spent significantly less time with deviant peers compared to those with less reliable romantic relationships ( $\beta = -.33, p < .001$ , Figure 9), Relationship reliability (21) with both friends and romantic partners also boosts mothers reports of workplace performance at 22 ( $\beta = .22, p < .05$ , Figure 12) as well as functional independence ( $\beta = .23, p < .05$ , Figure 13).

**Hypothesis 5.** *When imbalances between friendship and romantic quality exist, higher friendship quality in the context of lower romantic quality will predict higher scores on multiple measures of adjustment at age 22 as compared to higher romantic quality in the context of lower friendship quality.*

The same style of regressions analyses conducted above were used here to examine the extent to which relationship stability with friends at age 21 could predict higher scores in markers of overall wellness at age 22 as compared to romantic relationships stability at age 21, when there is an imbalance in the two. Gender and income remained covariates and interaction variables were created by standardizing reliable alliance of friendships and reliable alliance of romantic relationships and multiplying them together.

### *Social Acceptance*

Teens with highly reliable friendships and less reliable romantic relationships had the highest levels of social acceptance as reported by teens' best friends. ( $\beta = -.22, p < .05$ , Figure 7)

### *Happiness, Job Satisfaction, and Workplace Promotions*

Interestingly results from a significant interaction between friendship quality, relationship quality and teen's suspected happiness level suggest an inverse relationship such that when one relationship is highly reliable and the other is not the teens is reported significantly

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

happier than when both relationships are highly reliable or neither are reliable ( $\beta = -.21, p < .05$ , Figure 8). Similar relationships are found when looking at job satisfaction ( $\beta = -.29, p < .01$ , Figure 10), and workplace promotions ( $\beta = -.35, p < .001$ , Figure 11).

### Discussion

This study provides evidence for links between ego development, intimacy, and relationship quality (both in friendships and romance), and subsequently between relationship quality and adult wellness as measured across a variety of domains. Ego and intimacy development were assessed at age 18, relationship quality at age 21, and wellness at age 22. Interest in these variables, and development of the present study's hypotheses were influenced by existing research on the various associations between, ego, intimacy, developmental timing/ordering, social support, and romance (Adams & Shea, 1979; Blair & Holmberg, 2008). The preexisting body of research on these variables inspired examination of their cumulative effects on one another, and on an individual's post-adolescent adjustment.

Data from the current study suggests some support for the present study's hypotheses. However, it was found that the results are much more nuanced than direct, which 1) highlights the difficulties of clearly supporting theories of ego and identify development with data and 2) provides the opportunity for interesting, thoughtful interpretations to take place in response, hopefully inspiring discussion of the topic and plans for future studies.

The first hypothesis suggests that adolescents who demonstrate higher levels of ego development will report lower quality future romantic relationships, but will report higher quality future friendships. While there was no direct relationship found between higher ego-development and better quality friendships, data does support the idea of lower quality romantic relationships (in the form of reliable alliance) resulting from higher levels of ego development.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Partner dominance in romantic relationships was also found to positively correlate with higher ego development (i.e., “the teen always getting what they want”), indicating a potential quality of imbalance present in the romantic relationship, which, as Sadikaj & Zuroff (2017) highlights, can be indicative of a lower quality partnership.

Next it was predicted in the second hypothesis that adolescents who demonstrate higher levels of intimacy in romantic context will later report lower quality friendships, but higher quality romantic relationships. Current data partially supports this prediction, finding that lower levels of friendship quality (in terms of lower reliable alliance, satisfaction, and intimacy) are reported when adolescents are more romantically intimate at age 18. Results also showed an association between dominance in friendships (“the friend always gets what they want”) and romantic intimacy, again signifying a potential imbalance in friendships that may be representative of lower relationship quality. Taken together, the findings from hypotheses 1 and 2 indicate that while ego does not boost friendship quality as hypothesized, it may hurt romantic relationships as predicted. Similarly, though romantic intimacy does not help boost romantic relationship quality as predicted, it does seem to harm friendships.

The third hypothesis in this study predicted that in addition to any direct relationships found in the examination of the former two hypotheses, there will be subsequent interactions found between ego development, romantic intimacy, and relationship quality such that a) friendship quality will be greatest with greater ego develop and lower romantic intimacy and b) romantic quality will be greatest with more romantic intimacy and less ego. Evidence for high romantic intimacy and low ego development impacting romantic relationship quality in this way was supported by regression analyses demonstrating that this combination of variables predicted significantly higher reports of perceived partner-support in romantic relationships. Subsequently,

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

while correlation and regression analyses were not able to show data supporting an interaction between low intimacy/high ego and higher quality friendships, the data from regression analyses were able to show support for the idea that a *lack* of ego, in combination with higher romantic intimacy *diminished* friendship quality reports, in that the lowest friendship alliance reliability and satisfaction scores come from individuals with this variable combination. Additionally, results also appeared to show higher ego development as a sort of buffer against the negative implications of romantic intimacy on friendship alliance and satisfaction (relative to lower ego development). Thus, it appears that in the process of developing a strong sense of self (ego identity), one acquires skills and understanding that correlate directly with those needed to develop and maintain successful close peer relationships. These findings correspond with current literature that demonstrates higher levels of ego development associated with: complex experience sharing in friendships, collaborative styles of conflict resolution, deeper levels of interpersonal understating, and lower peer reports of hostility and inflexibility (Hennighausen et al., 2004). It seems the efforts that are required of adolescents for the development of romantic intimacy almost seemingly take away from the ego-related skills that support friendships, as demonstrated by the significant dissatisfaction and unreliability of friendships with adolescents who report higher romantic intimacy.

Although it does not necessarily appear that a well-developed ego guarantees higher quality in friendships, it can be suggested that the lack of ego, especially in combination with more interest in romantic intimacy, may threaten relationship quality. Perhaps this indicates a more delicate balance of ego development and intimacy (rather than high/high) is necessary for optimal outcomes, with the possibility that *too* much ego is just as harmful as a lack there of. Research in organizational-psychology (Paskvan, Bettina, & Korunka, 2013) has found that too

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

much ego/autonomy in the workplace can be just as harmful as its insufficiencies, harming one's occupational resources and workplace desirability. As such it follows that the impaired performance in the workplace resulting from both too little *and* too much ego could translate similarly into relationship performance possibly explaining why present analyses couldn't provide a direct link between higher ego and higher friendship quality.

The fourth hypothesis of this study aimed to look forward down the developmental timeline at how relationship qualities established by ego and intimacy development interact to affect adult "wellness" outcomes. It was predicted that adolescents who had reportedly higher quality friendships and higher quality romantic relationships would have the highest scores on adjustment measures compared to those who did not. A number of results from this study appear to support these predictions. First, data assessing one's perception of their own romantic appeal supported this idea, with the combination of more reliable friendships and more reliable romantic relationships elevating reports of romantic appeal, a sort of proxy for self-confidence. Next, time spent with deviant peers diminished as a result of higher quality relationships in both domains. Finally, in areas of workplace performance and functional independence, higher quality relationships with friends and romantic partners interacted to predict the most positive scores. These findings together can be interpreted to show that the more general support one feels they have in their life in both friendship and romantic domains, the easier it becomes for them to avoid aversive experiences, focus, succeed, and function well on their own as an adult. These ideas align with much of the work of current sociobiology and evolutionary psychology. For example Brewer & Caporael (1990) go to great lengths to criticize evolutionary perspectives that fail to take into account how critical social living is to the history and survival of humankind. Their work emphasizes how fundamental social motive characteristics and group survival are to

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

human nature, summarizing a great deal of cross-disciplinary support that demonstrates how all kinds of interpersonal support aids the mental, physical, and emotional wellbeing of individuals. It then follows in line with this research that the current study finds combinations of support in aggregate produce the best outcomes in certain domains for individuals.

While the overarching goal of the present study was to answer questions of general developmental trends and their effects across ages, not to specifically attempt to identify or endorse one single champion quality of development that supersedes all others as the key to happiness and health, there is an understanding that surpluses and deficiencies happen. In answering questions about the realities of development, it was important to also look at the effects having imbalances in friendship and romantic stability. As such, the final hypothesis of the current work predicted that when imbalances between friendship and romantic quality exist, higher friendship quality in the context of lower romantic quality will predict higher wellness in adulthood when compared to higher romantic quality in the context of lower friendship quality. This idea that “friends matter more,” so to speak, can be somewhat supported by the current data. In terms of social acceptance, happiness, job satisfaction, and workplace promotions in adulthood when there is an imbalance in relationship quality between romantic context and friendship context it appears that higher friendship quality has more of an elevating effect on the adjustment outcomes compared higher romantic relationship quality. Interpretation of this effect comes in echoes of the support for Eriksonian style developmental ordering mentioned at the introduction of this work. The idea that development happens “best” when certain milestones precede others can translate into these findings. Ego development preceding intimacy allows for quality friendships to precede quality romantic relationships, which may predict levels of later wellness. Romantic relationships have been noted in past research equally helpful for wellness as

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

other relationships (Demir, 2008) but perhaps this data is representing that when emerging adults acquire friendship quality *first*, their skill set develops in a way that allows for beneficial romantic experiences *later* which in combination will then boost happiness and health during later adulthood. While this trend, as predicted by hypotheses of the current study, is relatively supported, it is worthy to note that the data is suggestive of a second (perhaps simultaneous) trend as well. Interpretation of results could arguably suggest the possibility that it might not be the *ego-first* and *friendships-more* developmental patterns that primarily responsible for the rise adult adjustment levels but perhaps it is just the imbalance of domains in general that create less crossover competition for allocation of interpersonal relationship maintenance efforts allowing for more leftover resources to be put to use in ways that boost wellness.

There are several limitations to these findings which are important to note. First, the sample used in this study lacks Hispanic and Asian representation, which makes it difficult to generalize the results of this study to those populations. The generalizability of these findings is also limited, because participants represent only the Southeast region of the United States. Future replications are encouraged to include more ethnically, racially, and culturally diverse samples with less constricted geographical boundaries in hopes of increasing external validity. Additionally, as data used in this study came from a larger longitudinal study, hypotheses were formed on an ad hoc basis relying on measures previously developed in aims of answering other specific questions. Thus, the internal validity of constructs could notably improve in development of future studies which could use more targeted questions to assess things like “interest” in ego vs. intimacy development with more distinct clarifications between types of intimacy (in friendships, family, and romantic contexts.)



## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Hopefully, future research can examine the relationships between ego development vs. intimacy development in adolescents and how those processes affect social and romantic relationships and later well-being. Additional notice could be taken to the timeline of hypotheses with future efforts made to encompass a wider, more stage-representative age range. Additionally, specific efforts to include all sexual orientations when asking questions about romantic relationships is also a way future studies could improve upon this work.

Despite this study's limitations, the results are nonetheless relatively supportive of both previous research and present hypotheses inasmuch as intimacy development at the expense of ego development, and vice versa, can have negative effects on relationship quality in both the domains of friendships and romantic relationships in specific ways. Also, the idea that relationship qualities then have effects on one's overall adjustment/well-being can be supported by the results of this study. These findings highlight the importance of life-span development, hopefully making clear that continuously changing social contexts produce different needs, norms, and trends and these can all affect both directly and interactively the general health of individuals. As such, future research is encouraged to match efforts attempted in this study with the aim of acquiring more information that helps focus and clean the lens through which development is viewed so discourse surrounding the understanding of human development can hopefully even more clearly suggest how happy health individuals come to be, never taking for granted what has seemed to be correct in the past, and always keeping in consideration the aspects of uniqueness and equifinality in individual development.

### References

- Adams, G.R. & Shea, J.A (1979). The relationship between identity status, locus of control, and ego development. *Journal of Youth and Adolescence* 8(1), 81-89.  
<https://doi.org/10.1007/BF02139142>
- Allen, J. P., Hall, F. D., Insabella, G. M., Land, D. J., Marsh, P. A., & Porter, M. R. (2001). Supportive behavior coding system. Unpublished manuscript. Charlottesville: University of Virginia.
- Allen, J. P., Narr, R. K., Kansky, J. and Szewedo, D. E. (2019), Adolescent peer relationship qualities as predictors of long-term romantic life satisfaction. *Child Development*.  
doi:[10.1111/cdev.13193](https://doi.org/10.1111/cdev.13193)
- Arnett, J. J. (2004). Emerging adulthood: The winding road from the late teens through the twenties. New York, NY, US: Oxford University Press.
- Beyers, W., & Seiffge-Krenke, I. (2010). Does identity precede intimacy? Testing Erikson's theory on romantic development in emerging adults of the 21<sup>st</sup> century. *Journal of Adolescent Research*, 25(3), 387-415.
- Bilodeau, B. L., & Renn, K. A. (2005). Analysis of LGBT identity development models and implications for practice. *New Directions for Student Services* 111(25). Retrieved from  
<https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=edsbl&AN=RN175618546&site=eds-live&scope=site>
- Blair, K.L., & Holmberg, D. (2008). Perceived social network support and well being in same-sex versus mixed-sex romantic relationships. *Journal of Social and Personal Relationships* 25(5), 769-791. <https://doi.org/10.1177/0265407508096695>

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

- Brewer, M. B., & Caporael, L. R. (1990). Selfish genes vs. selfish people: sociobiology as origin myth. *Motivation and Emotion*, 14(4), 237-243. <http://dx.doi.org/10.1007/BF00996182>
- Capaldi, D. M., King, J., & Wilson, J. (1992). Young Adult Adjustment Scale. Unpublished OSLC instrument. (Available from OSLC, 160 E. 4th, Eugene, OR 97401.)
- Cohen, S. (2004). Social relationships and health. *American Psychologist*, 59(8), 676-684. <http://dx.doi.org/10.1037/0003-066X.59.8.676>
- Côté, J. E., & Levine, C. (1987). A formulation of Erikson's theory of ego identity formation. *Developmental Review*, 7, 273-325. [https://doi.org/10.1016/0273-2297\(87\)90015-3](https://doi.org/10.1016/0273-2297(87)90015-3)
- Cowen, E. L. (1994). The enhancement of psychological wellness: challenges and opportunities. *American Journal of Community Psychology* 2, 149. <https://doi.org/10.1007/BF02506861>
- Demir, M. (2008). Sweetheart, you really make me happy: romantic relationship quality and personality as predictors of happiness among emerging adults. *Journal Of Happiness Studies*, 9(2), 257-277.
- Dyk, P.H., & Adams, G.R. (1990). Identity and intimacy: an initial investigation of three theoretical models using cross-lag panel correlations. *Journal of Youth and Adolescence*, 19(2) <https://doi.org/10.1007/BF01538715>
- Erikson: Post-Freudian Theory (n.d.) Retrieved from [https://www.ivcc.edu/uploadedFiles/\\_faculty/\\_mangold/Erikson%20-%20Post%20Freudian%20Theory.pdf](https://www.ivcc.edu/uploadedFiles/_faculty/_mangold/Erikson%20-%20Post%20Freudian%20Theory.pdf)
- Etzion, D. (1984). Moderating effect of social support on the stress-burnout relationship. *Journal of Applied Psychology*, 69(4), 615-622. <http://dx.doi.org/10.1037/0021-9010.69.4.615>

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

- Furman, W. & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology*, 21, 1016-1022.
- Gadernann, A., Guhn, M., Schonert-Reichl, K., Hymel, S., Thomson, K., & Hertzman, C. (2016). A Population-Based Study of Children's Well-Being and Health: The Relative Importance of Social Relationships, Health-Related Activities, and Income. 17(5), 1847-1872.
- Goodenow, C., Reisine, S. T., & Grady, K. E. (1990). Quality of social support and associated social and psychological functioning in women with rheumatoid arthritis. *Health Psychology*, 9(3), 266-284. <http://dx.doi.org/10.1037/0278-6133.9.3.266>
- Granello, P. F. (2001). Comparison of wellness and social support networks in different age groups. *Adultspan Journal*, 3(1), 12-22.
- Hair, E. C., Jager, J., & Garrett, S. B., (2002). Helping teens develop healthy social skills and relationships: what the research shows about navigating adolescence. American Teens. *Child Trends Research Brief*. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=eric&AN=ED467563&site=eds-live&scope=site>
- Hennighausen, K. H., Hauser, S. T., Billings, R. L., Schultz, L. H., & Allen, J. P. (2004). Adolescent Ego Development Trajectories and Young Adult Relationship Outcomes. *The Journal of Early Adolescence*, 24(1), 29-44. <http://dx.doi.org/10.1177/0272431603260920>
- Hauser, S. T. (1991). Adolescents and their families: paths of ego development. *New York: Macmillan*.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

- Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: the relationship between kindergarten social competence and future wellness. *American Journal Of Public Health, 105*(11), 2283-2290.
- Kacerguis, M.A. & Adams, G.R. (1980). Erikson stage resolution: the relationship between identity and intimacy. *Journal of Youth and Adolescence 9*(2), 117-126.  
<https://doi.org/10.1007/BF02087930>
- Kutek, S., Turnbull, D., & Fairweather-Schmidt, A. (2011). Rural men's subjective well-being and the role of social support and sense of community: evidence for the potential benefit of enhancing informal networks. *Australian Journal Of Rural Health, 19*(1), 20-26.
- Knight, Z. G. (2017). A proposed model of psychodynamic psychotherapy linked to Erik Erikson's eight stages of psychosocial development. *Clinical Psychology & Psychotherapy, 24*(5), 1047–1058. <https://doi.org/10.1002/cpp.2066>
- Lin, D. T., Liebert, C. A., Tran, J., Lau, J. N., & Salles, A. (2016). Original scientific article: emotional intelligence as a predictor of resident well-being. *Journal Of The American College Of Surgeons, 223*352-358
- Loevinger, J. & Wessler, R. (1978.) Measuring ego development, Volume One: Construction and use of the Sentence Completion Test. San Francisco, CA: Jossey-Bass, Inc.
- Messer, B., & Harter, S. (1986). *The adult self-perception profile*. Unpublished manuscript, University of Denver.
- Marsh, P., Allen, J. P., Ho, M., Porter, M., & McFarland, F. C. (2006). The changing nature of adolescent friendships longitudinal links with early adolescent ego development. *The Journal of Early Adolescence, 26*(4), 414–431.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

- Painter, J., Gray, K., McGinn, M., Mostoufi, S., Hoerster, K., Painter, J. M., & ... Hoerster, K. D. (2016). The relationships of posttraumatic stress disorder and depression symptoms with health-related quality of life and the role of social support among Veterans. *Quality Of Life Research*, 25(10), 2657-2667.
- Parker, J. G., & Asher, S. R. (1993). Friendship Quality Questionnaire Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology*, 29, 611-621.
- Paskvan, M., Bettina, K., Korunka, C. (2013). Can autonomy lead to emotional exhaustion? Short-term strain responses explaining negative effects of autonomy. *University of Vienna*.  
<http://dx.doi.org/10.1037/e577572014-262>
- Paul, E. L., & White, K. M. (1990). The development of intimate relationships in late adolescence. *Adolescence*, 25(98), 375. Retrieved from  
<https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=pbh&AN=9012311811&site=eds-live&scope=site>
- Ristau S. (2011). People do need people: social interaction boosts brain health in older age. *Journal of the American Society on Aging* 35(2), 70-76. Retrieved from  
<https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=rzh&AN=104634790&site=eds-live&scope=site>
- Rosenthal, D.A., Gurney, R.M., & Moore, S.M. (1981). From trust on intimacy: a new inventory for examining Erikson's stages of psychosocial development. *Journal of Youth and Adolescence*, 10(6), 525-537. <https://doi.org/10.1007/BF02087944>

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

- Sadikaj, G., S., D., & Zuroff, D. C. (2017). Negative affective reaction to partner's dominant behavior influences satisfaction with romantic relationship. *Journal of Social and Personal Relationships*, 34(8), 1324–1346. <https://doi.org/10.1177/0265407516677060>
- Sanderson, C. A., & Cantor, N. (1995). Social dating goals in late adolescence: Implications for safer sexual activity. *Journal of Personality and Social Psychology*, 68(6), 1121-1134. <http://dx.doi.org/10.1037/0022-3514.68.6.1121>
- Schiedel, D. G., & Marcia, J. E. (1985). Ego identity, intimacy, sex role orientation, and gender. *Developmental Psychology*, 21(1), 149-160. <http://doi:10.1037/0012-1649.21.1.149>
- Umberson, D., & Montez, J. K. (2010). Social relationships and health: a flashpoint for health Policy. *Journal of Health and Social Behavior*, 51(Suppl), S54–S66.
- Wilcox, B. L. (1981). Social support, life stress, and psychological adjustment: a test of the buffering hypothesis. *American Journal of Community Psychology*, 9(4), 371. <https://doi.org/10.1007/BF00918169>
- Yasumasa, K. (2013). Reasons to not desire a steady romantic relationship, in relation to adolescent ego development. *Japanese Journal Of Developmental Psychology*, 24(3), 284-294.
- Yıldırım, N., Karaca, A., Cangur, S., Acıkgöz, F., & Akkus, D. (2017). The relationship between educational stress, stress coping, self-esteem, social support, and health status among nursing students in Turkey: A structural equation modeling approach. *Nurse Education Today*, 4833-39
- Zimmer-Gembeck, M.J., Petherick, J. (2006). Intimacy dating goals and relationship satisfaction during adulthood: identity formation, age, and sex as moderators. *International Journal of Behavioral Development* 30(2) 167-177. <https://doi.org/10.1177/0165025406063636>

# EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Table 1. Means, standard deviations, and correlations of primary variables.

Variable <i>Perspective</i>	Mean (SD)	Ego	Intimacy	Reliable Alliance (CP to TN)	Reliable Alliance (TN to CP)	Reliable Alliance (RP to TN)	Reliable Alliance (TN to RP)
1. Income	43,618 (22,420)	.18*	.25*	-.05	-.12	-.15	-.04
2. Gender	47% male	.03	.20	.03	.14	.03	.10
3. Ego (18)	45.70 (4.93)	-	.15	-.07	-.05	-.31**	-.09
4. Intimacy (18)	0.82 (0.66)	.15	-	-.22	-.23	-.15	.13
5. Friends: Reliable Alliance (21) <i>CP</i>	12.63 (2.76)	-.07	-.22	-	.40***	.20*	.17
6. Friends: Reliable Alliance (21) <i>TN</i>	12.83 (2.39)	-.05	-.23	.40***	-	.22*	.29**
7. Romance: Reliable Alliance (21) <i>RP</i>	11.66 (2.76)	-.31*	-.15	.20*	.22*	-	.32**
8. Romance: Reliable Alliance (21) <i>TN</i>	11.24 (3.36)	-.09	.13	.17	.29**	.32**	-
9. Friendship Satisfaction (21) <i>CP</i>	13.01 (2.10)	-.11	-.26	.64***	.31**	.10	.09
10. Friendship Satisfaction (21) <i>TN</i>	13.28 (2.13)	.05	.04	.24**	.63***	.13	.25**
11. Relationship Satisfaction (21) <i>RP</i>	13.36 (2.23)	-.11	-.06	.18	.04	.52***	.12
12. Relationships Satisfaction (21) <i>TN</i>	12.71 (2.52)	-.02	.05	.22*	.15	.13	.71***
13.. Friendship Support (21) <i>CP</i>	10.99 (3.15)	-.04	.03	.40***	.23**	.21*	-.06
14.. Friendship Support (21) <i>TN</i>	11.26 (2.77)	.07	.05	.22**	.43***	.26**	.18
15. Relationship Support (21) <i>RP</i>	12.14 (2.60)	-.10	.09	.23*	.06	.45***	.25**
16. Relationship Support (20-22) <i>TN</i>	12.47 (2.79)	.04	.14	.05	-.01	.26**	.66***
17. Social Acceptance (22) <i>CP</i>	13.38 (2.22)	-.02	.18	.13	.13	.00	-.05
18. Social Acceptance (22) <i>TN</i>	13.43 (2.27)	.05	.12	.05	.19*	.01	.04
19. Romantic Appeal (22) <i>CP</i>	12.03 (2.64)	-.04	.01	.13	.21*	.02	.16
20. Romantic Appeal (22) <i>TN</i>	12.60 (2.85)	-.15	.22	.10	.12	.29**	.05
21. Punishment (22) <i>RP</i>	4.28 (2.10)	-.15	.18	-.07	.10	.03	.12

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*TN*: teen's perspective, *CP*: close peer perspective, *RP*: romantic partner's perspective, *MOM*: teen's mother's perspective



# EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

*Table 1.con'*. Means, standard deviations, and correlations of primary variables continued.

Variable <i>Perspective</i>	Mean (SD)	Ego	Intimacy	Reliable Alliance (CP to TN)	Reliable Alliance (TN to CP)	Reliable Alliance (RP to TN)	Reliable Alliance (TN to RP)
22. Punishment (22) <i>TN</i>	3.86 (1.69)	-.10	-.12	-.04	-.09	.04	-.04
23. Happiness (22) <i>CP</i>	8.43 (1.54)	.10	.00	.03	.11	.02	-.21*
24. Happiness (22) <i>MOM</i>	8.27 (1.64)	.18	.01	.00	.13	-.03	.11
25. Deviant Friendships (22) <i>CP</i>	17.72 (5.65)	.00	.19	.05	-.06	-.14	-.06
26. Deviant Friendships (22) <i>MOM</i>	16.19 (4.55)	-.05	.04	.02	-.04	-.07	-.30**
27. Job Satisfaction (22) <i>CP</i>	3.34 (1.12)	.00	.27	.13	-.04	-.14	.02
28. Job Satisfaction (22) <i>MOM</i>	3.41 (1.04)	.11	-.03	.00	.01	-.12	-.07
29. Promotions (22) <i>CP</i>	2.35 (.75)	.08	-.30*	.11	-.05	.01	.03
30. Promotions (22) <i>MOM</i>	0.38 (.52)	-.05	-.01	-.10	.13	.01	.03
31. Workplace Performance (22) <i>CP</i>	34.94 (4.41)	.04	.28	.06	.09	-.15	-.05
31. Workplace Performance (22) <i>MOM</i>	37.19 (4.02)	.20	.24	.22	.14	-.18	.08
32. Functional Independence (22) <i>CP</i>	19.94 (3.76)	.13	.14	-.08	.05	-.06	-.08
33. Functional Independence (22) <i>MOM</i>	19.37 (4.30)	.10	.18	.12	.11	-.09	-.01

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*TN*: teen's perspective, *CP*: close peer perspective, *RP*: romantic partner's perspective, *MOM*: teen's mother's perspective

# EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Table 2.

*Predicting Reliable Alliance and Satisfaction in Friendships and Romantic Relationships.*

	Reliable Alliance (age 21)					Satisfaction (age 21)			
	Friendships		Romantic Relationships			Friendships		Romantic Relationships	
	Teen Perspective	Best Friend Perspective	Teen Perspective	Romantic Partner Perspective		Teen Perspective	Best Friend Perspective	Teen Perspective	Romantic Partner Perspective
	$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final		$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final
<b>Demographics</b>									
Gender	.13	.03	.04	.07		.04	-.04	-.02	-.11
Income	.02	.10	-.06	-.06		-.11	.01	.02	.03
<b>Outcome at age 18</b>									
Total Friendship Quality	.49***	.41**				.16	.40**		
Reliable Alliance / Satisfaction			.49	.40**				.37**	.10
<b>Primary Predictors</b>									
Ego Development (18)	.03	-.04	-.10	-.28**		.08	-.07	-.06	-.13
Intimacy in Romantic Relationship (18)	-.49***	-.45**	.24	-.14		-.0002	-.40**	.05	-.08
<b>Interaction</b>									
Ego Development X Intimacy in Romantic Relationships	.37**	.33*	-.23	.07		-.08	.32**	-.21	.04

*Note.* Gender coded as: 1 = males, 2 = females;

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

# EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Table 3.  
*Predicting Intimacy and Support in Friendships and Romantic Relationships.*

	Intimacy (age 21)					Support (age 21)			
	Friendships		Romantic Relationships			Friendships		Romantic Relationships	
	Teen Perspective	Best Friend Perspective	Teen Perspective	Romantic Partner Perspective		Teen Perspective	Best Friend Perspective	Teen Perspective	Romantic Partner Perspective
	$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final		$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final
<b>Demographics</b>									
Gender	.24	.04	.09	-.12		.25**	.12	.16	-.20**
Income	-.04	-.097	-.02	.03		-.03	-.12	-.002	-.21**
<b>Outcome at age 18</b>									
Total Friendship Quality	.23*	.45***				.14	.40***		
Intimacy / Support			.30**	.34**				.12	.28**
<b>Primary Predictors</b>									
Ego Development (18)	.14	-.03	.08	-.12		.09	-.004	.02	-.08
Intimacy in Romantic Relationship (18)	-.32**	-.03	.03	-.04		-.10	-.06	.16	.11
<b>Interaction</b>									
Ego Development X Intimacy in Romantic Relationships	.15	.19	-.11	.02		.16	.06	-.26*	.14

Note. Gender coded as: 1 = males, 2 = females;

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

# EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Table 4.  
*Predicting Dominance and Punishment in Friendships and Romantic Relationships.*

	Dominance (age 21)					Punishment (age 21)			
	Friendships		Romantic Relationships			Friendships		Romantic Relationships	
	Teen Perspective	Best Friend Perspective	Teen Perspective	Romantic Partner Perspective		Teen Perspective	Best Friend Perspective	Teen Perspective	Romantic Partner Perspective
	$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final		$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final
<b>Demographics</b>									
Gender	-.26**	-.21**	-.22**	.06		-.03	-.004	-.15	.23**
Income	.07	.15	.11	.10		-.03	.08	.12	-.03
<b>Outcome at age 18</b>									
Total Friendship Quality	-.22**	.07				-.22*	-.03		
Dominance / Punishment			-.19	.16				.26**	-.09
<b>Primary Predictors</b>									
Ego Development (18)	.06	.06	-.23**	.26		.08	-.12	-.16	-.20
Intimacy in Romantic Relationship (18)	.23*	.15	.26	.27		.25	-.15	-.09	.25
<b>Interaction</b>									
Ego Development X Intimacy in Romantic Relationships	-.10	-.20	.05	-.002		.23	.10	.02	-.40**

Note. Gender coded as: 1 = males, 2 = females;

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

# EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

Table 5.  
*Predicting Wellness Outcomes from Friendship and Romantic Relationship Stability.*

	Romantic Appeal (22)		Social Acceptance (22)			Happiness (22)		Deviant Friendships (22)	
	Teen Perspective	Best Friend Perspective	Teen Perspective	Best Friend Perspective		Best Friend Perspective	Mom Perspective	Best Friend Perspective	Mom Perspective
	$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final		$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final
<b>Demographics</b>									
Gender	.09	.08	-.01	.02		.03	.02	-.31***	-.23*
Income	-.02	-.21**	.09	.04		.05	.06	.04	.05
<b>Primary Predictors</b>									
Reliable Alliance of Friendship (21)	.06	.13	.05	.12		.002	.03	.10	-.02
Reliable Alliance of Romantic Relationship (21)	.33**	-.10	-.02	-.09		-.02	-.02	-.10	-.12
<b>Interaction</b>									
Reliable Alliance of Friendship (21) X Reliable Alliance of Romantic Relationship (21)	.23*	-.04	-.06	-.22*		-.21*	.11	.04	-.33**

Note. Gender coded as: 1 = males, 2 = females;

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

# EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT

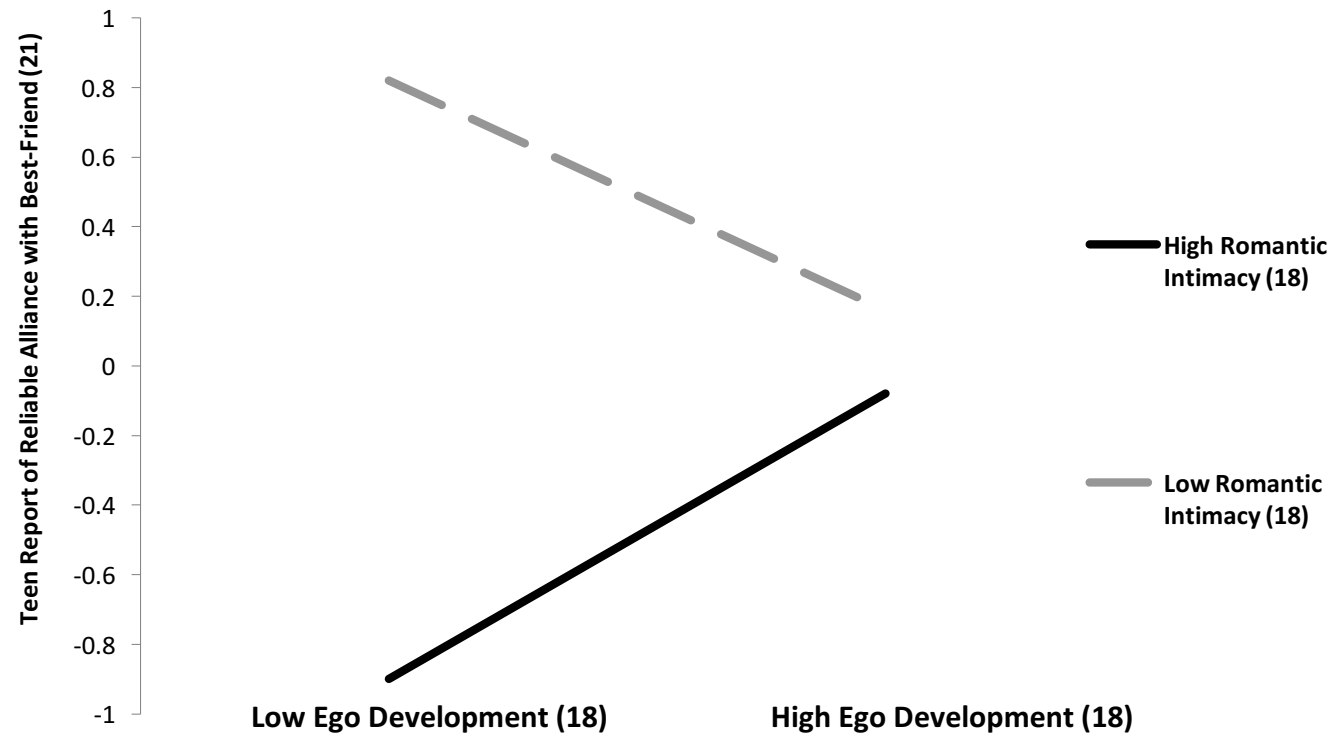
Table 6.  
*Predicting Wellness Outcomes from Friendship and Romantic Relationship Stability.*

	Job Satisfaction (22)		Promotions (22)			Work Performance (22)		Functional Independence (22)	
	Best Friend Perspective	Mom Perspective	Best Friend Perspective	Mom Perspective		Best Friend Perspective	Mom Perspective	Best Friend Perspective	Mom Perspective
	$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final		$\beta$ final	$\beta$ final	$\beta$ final	$\beta$ final
<b>Demographics</b>									
Gender	-.09	.03	-.24**	-.12		.14	.15	.11	.19**
Income	.05	-.02	-.15	.02		-.003	.11	.08	.12
<b>Primary Predictors</b>									
Reliable Alliance of Friendship (18)	.14	.02	.09	-.10		.09	.27**	-.08	.17*
Reliable Alliance of Romantic Relationship (21)	-.23*	-.12	-.10	.02		-.20	-.13	-.10	-.03
<b>Interaction<sup>4</sup></b>									
Reliable Alliance of Friendship (18) X Reliable Alliance of Romantic Relationship (21)	-.29**	.04	-.35***	.02		-.23	.22*	-.13	.23*

Note. Gender coded as: 1 = males, 2 = females;

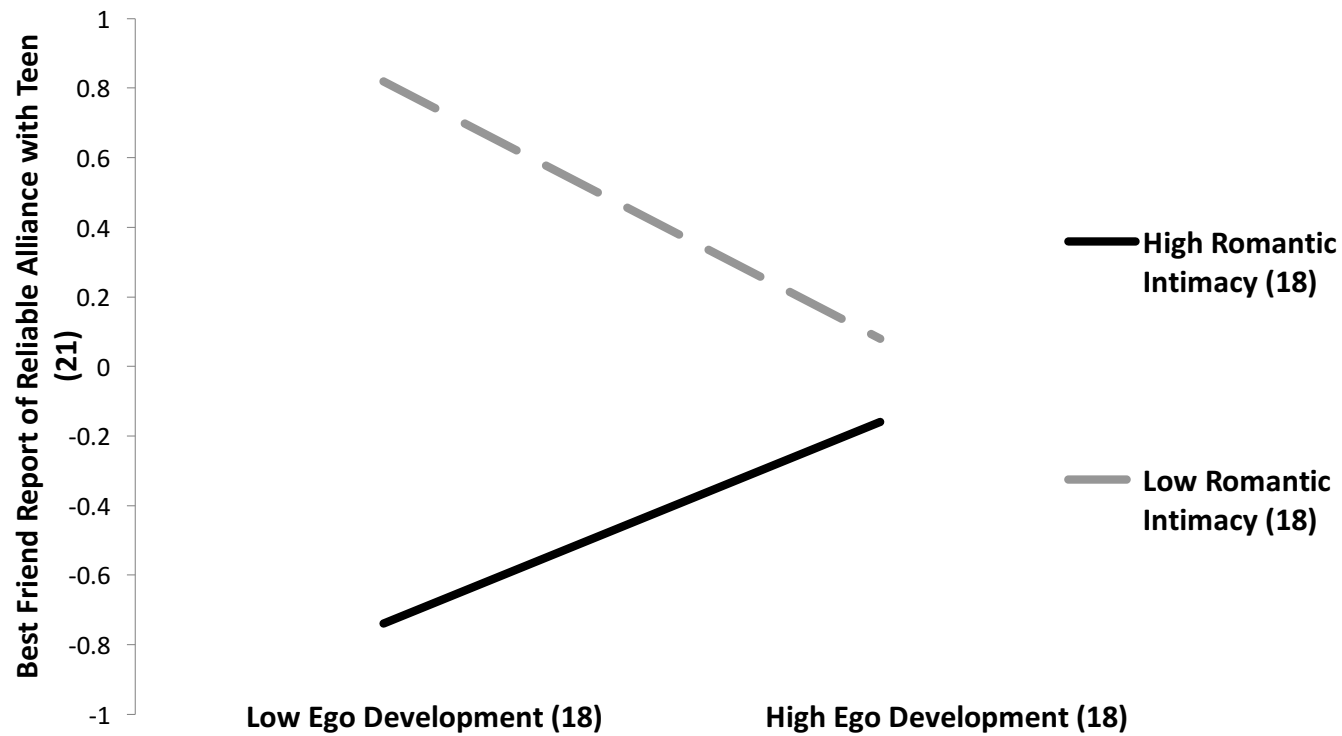
\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



*Figure 1.* Interaction between ego development (18) and romantic intimacy (18) predicting friendship reliable alliance from teen's perspective (21). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

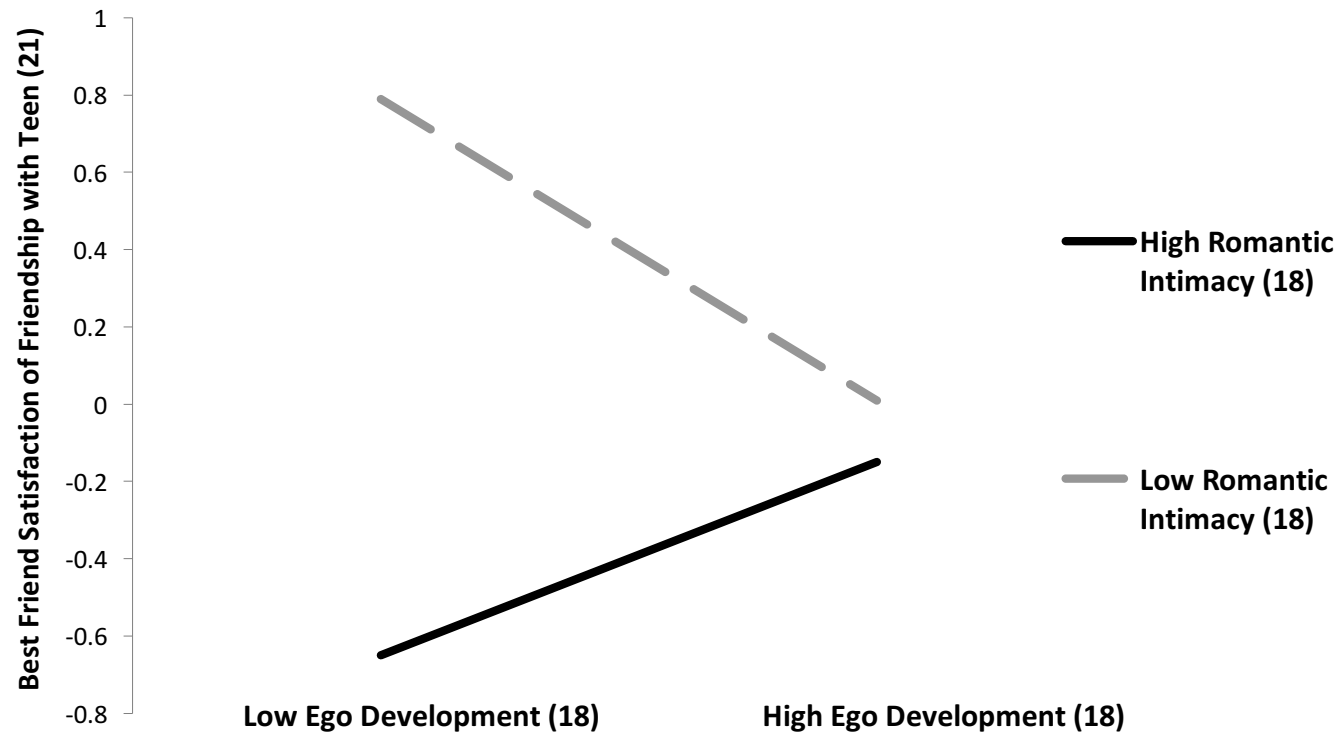
## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



*Figure 2.* Interaction between ego development (18) and romantic intimacy (18) predicting friendship reliable alliance from best friend's perspective (21). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

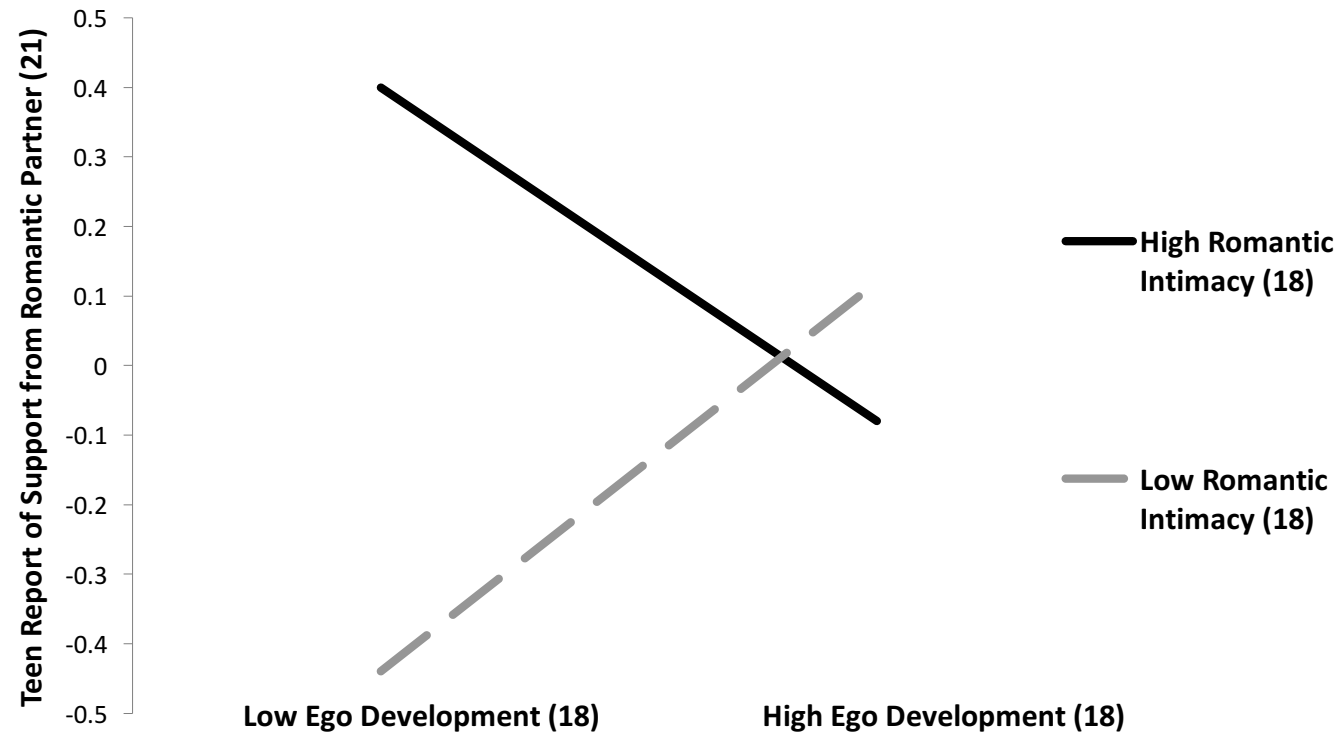


## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



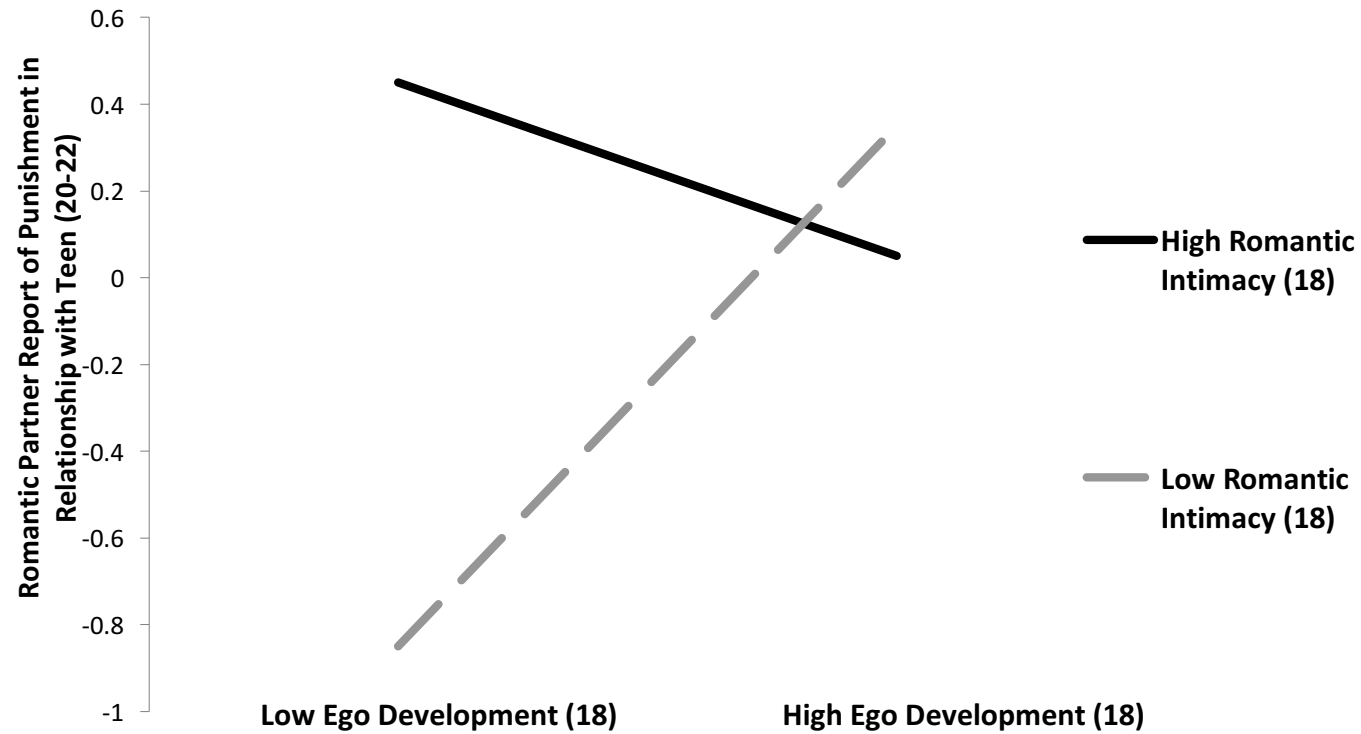
*Figure 3.* Interaction between ego development (18) and romantic intimacy (18) predicting best friend's satisfaction with the friendship (21). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



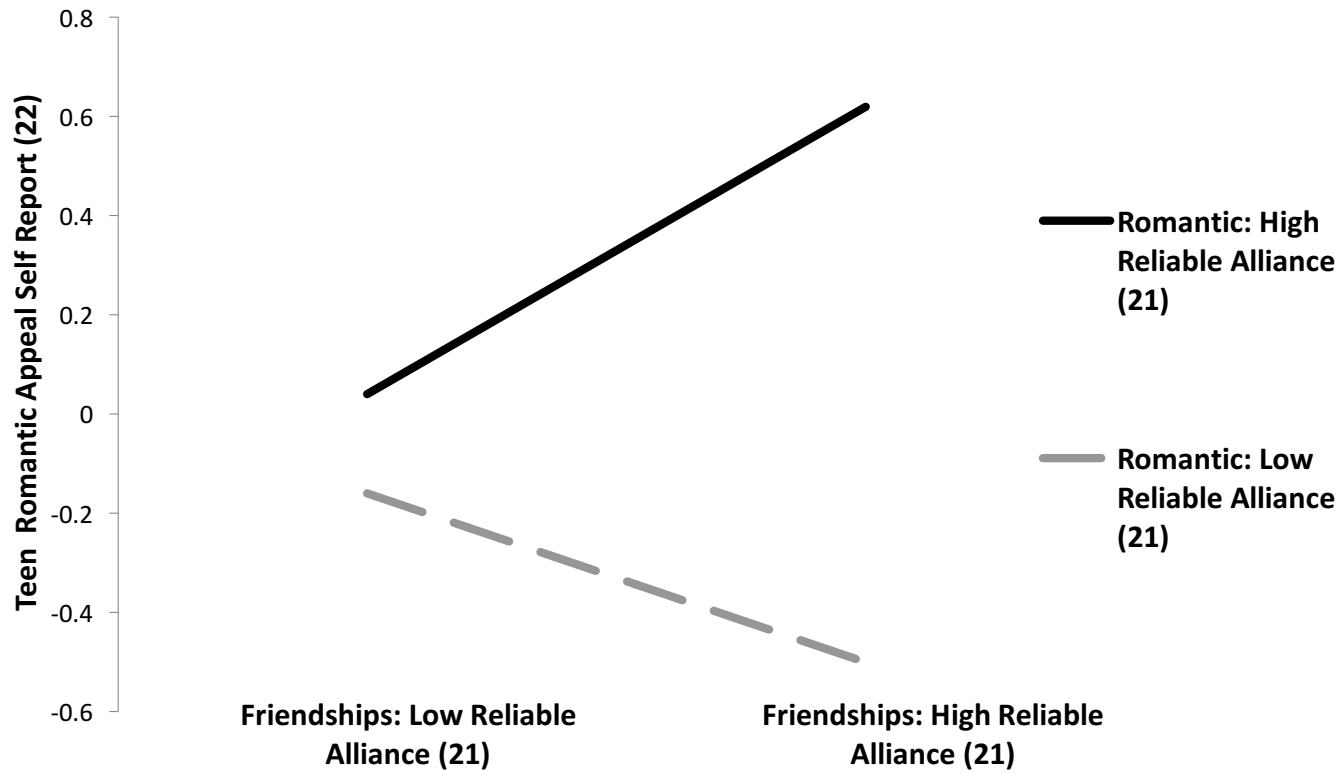
*Figure 4.* Interaction between ego development (18) and romantic intimacy (18) predicting teen's perceived support from romantic partner (21). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



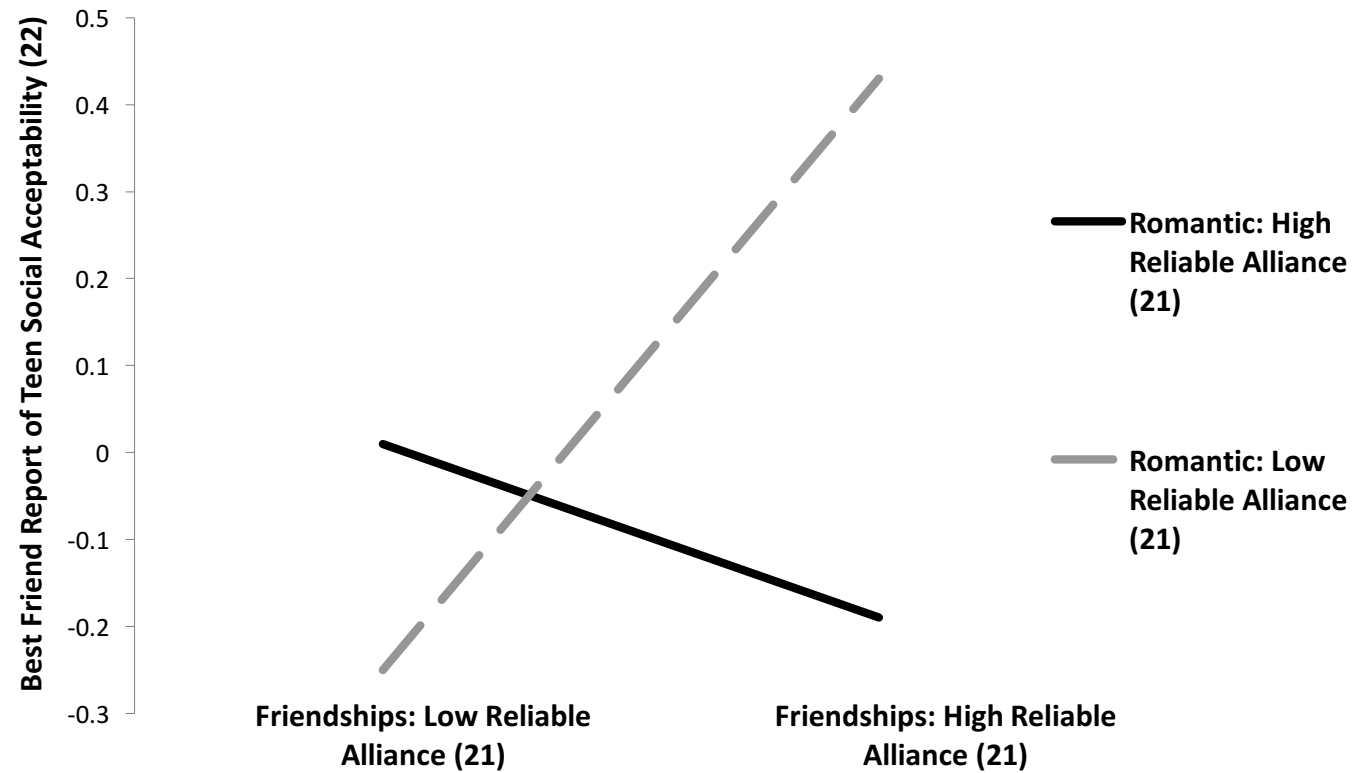
*Figure 5.* Interaction between ego development (18) and romantic intimacy (18) predicting romantic partner's report of being punished in romantic relationship (21). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



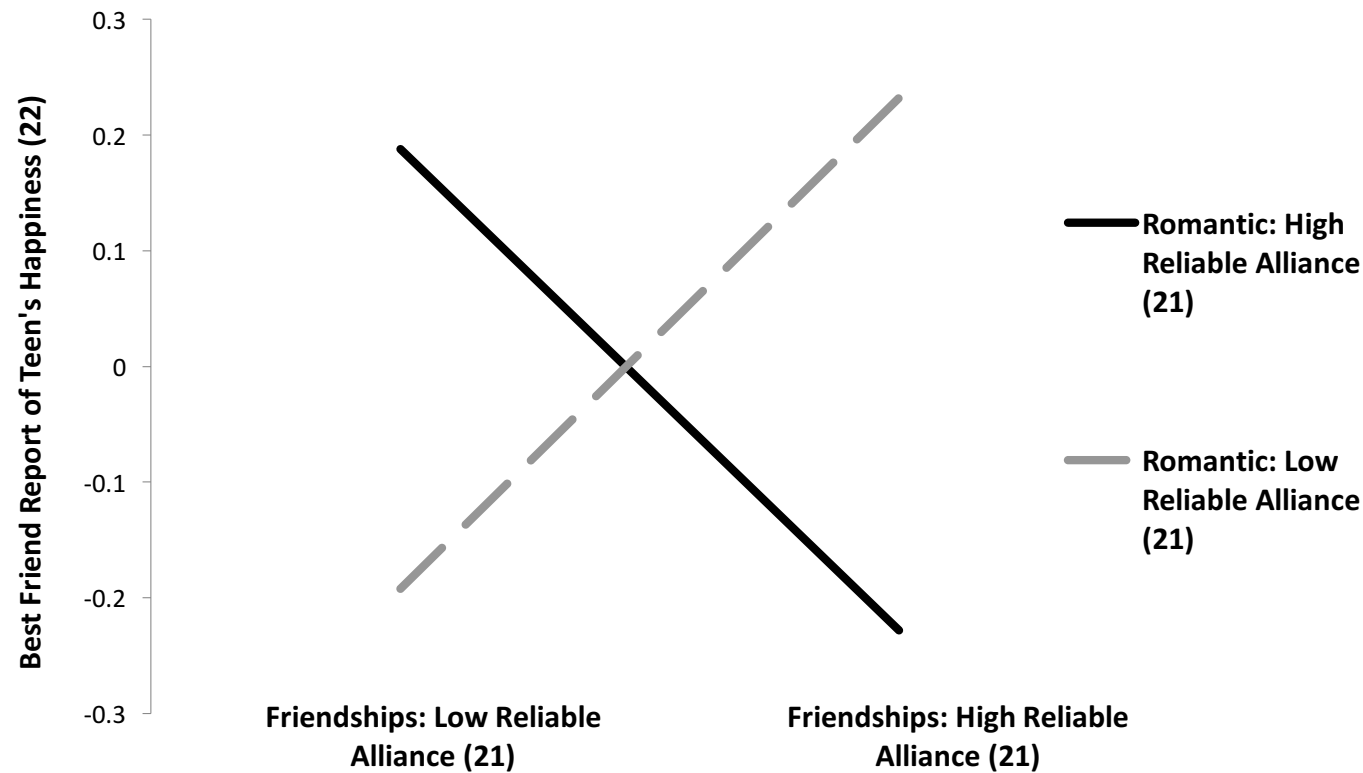
*Figure 6.* Interaction between reliable alliance in friendships (21) and reliable alliance in romantic relationships (21) predicting teen's romantic appeal (22). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



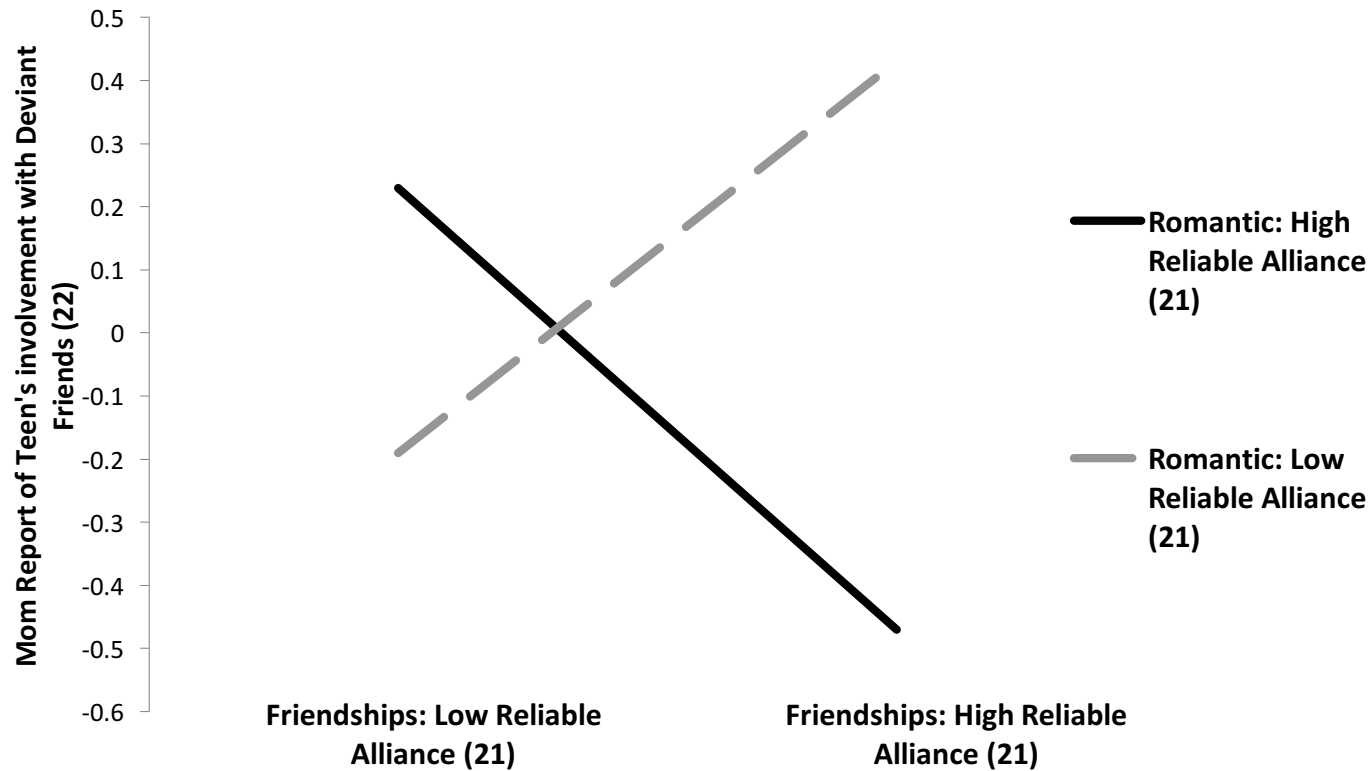
*Figure 7.* Interaction between reliable alliance in friendships (21) and reliable alliance in romantic relationships (21) predicting best friend's report of teen's social acceptability (22). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



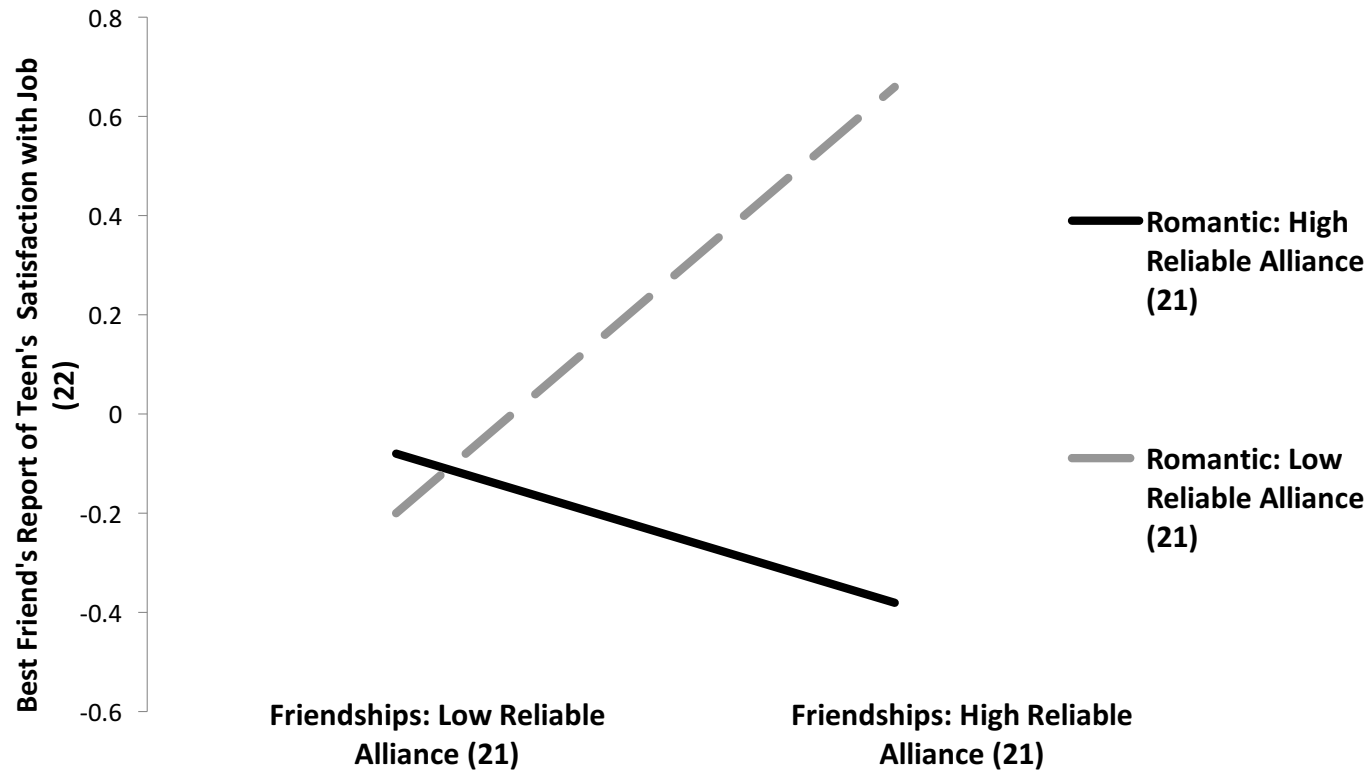
*Figure 8.* Interaction between reliable alliance in friendships (21) and reliable alliance in romantic relationships (21) best friend's report of teen's happiness. High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



*Figure 9.* Interaction between reliable alliance in friendships (21) and reliable alliance in romantic relationships (21) predicting mom's report of time teen spends with deviant peers (22). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

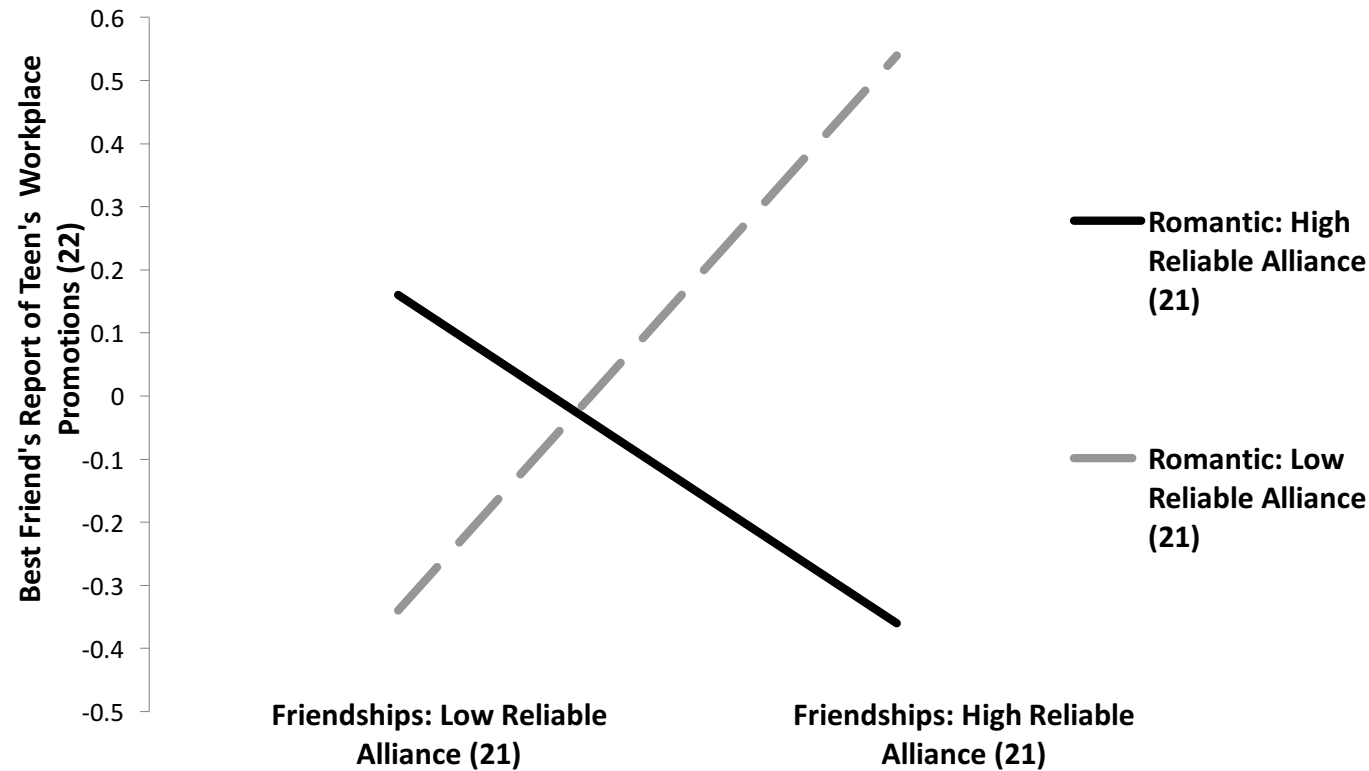
## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



*Figure 10.* Interaction between reliable alliance in friendships (21) and reliable alliance in romantic relationships (21) predicting best friend's report of teen's job satisfaction (22). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

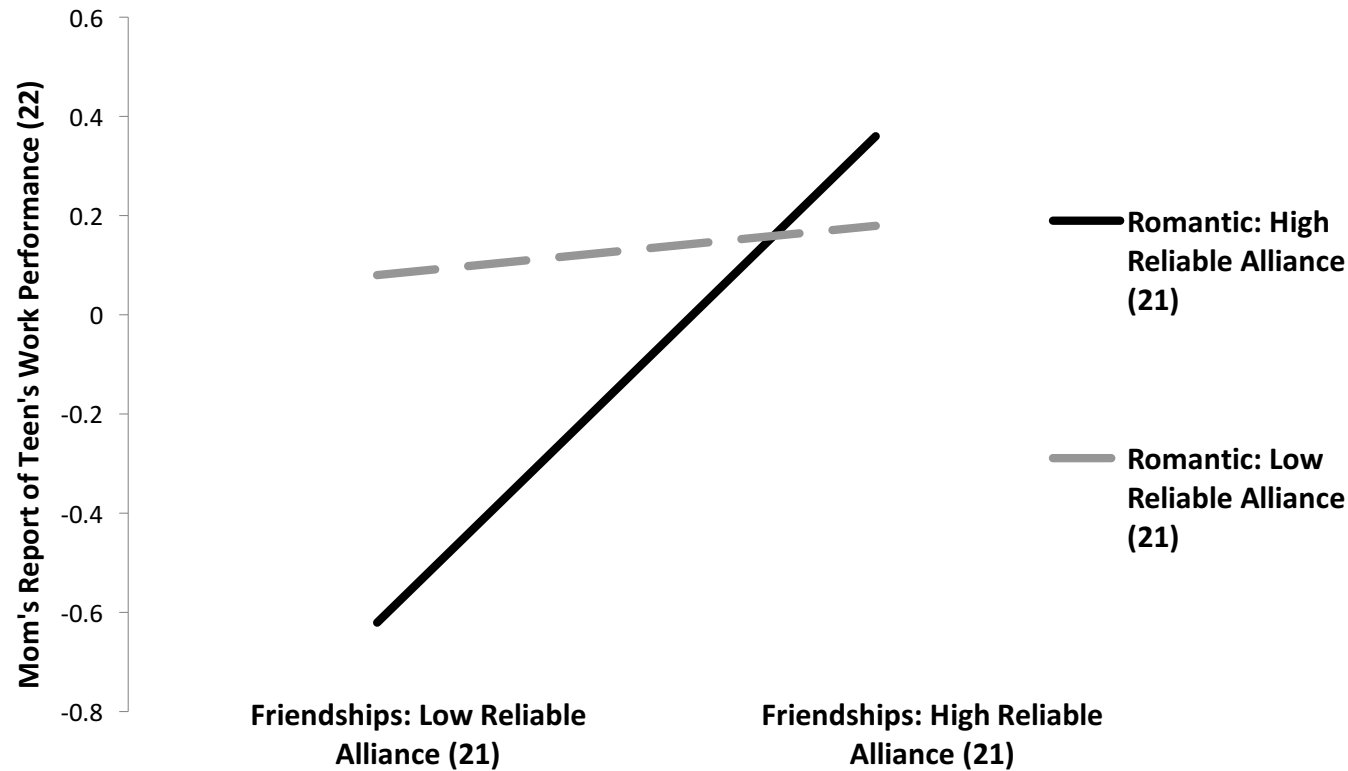


## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



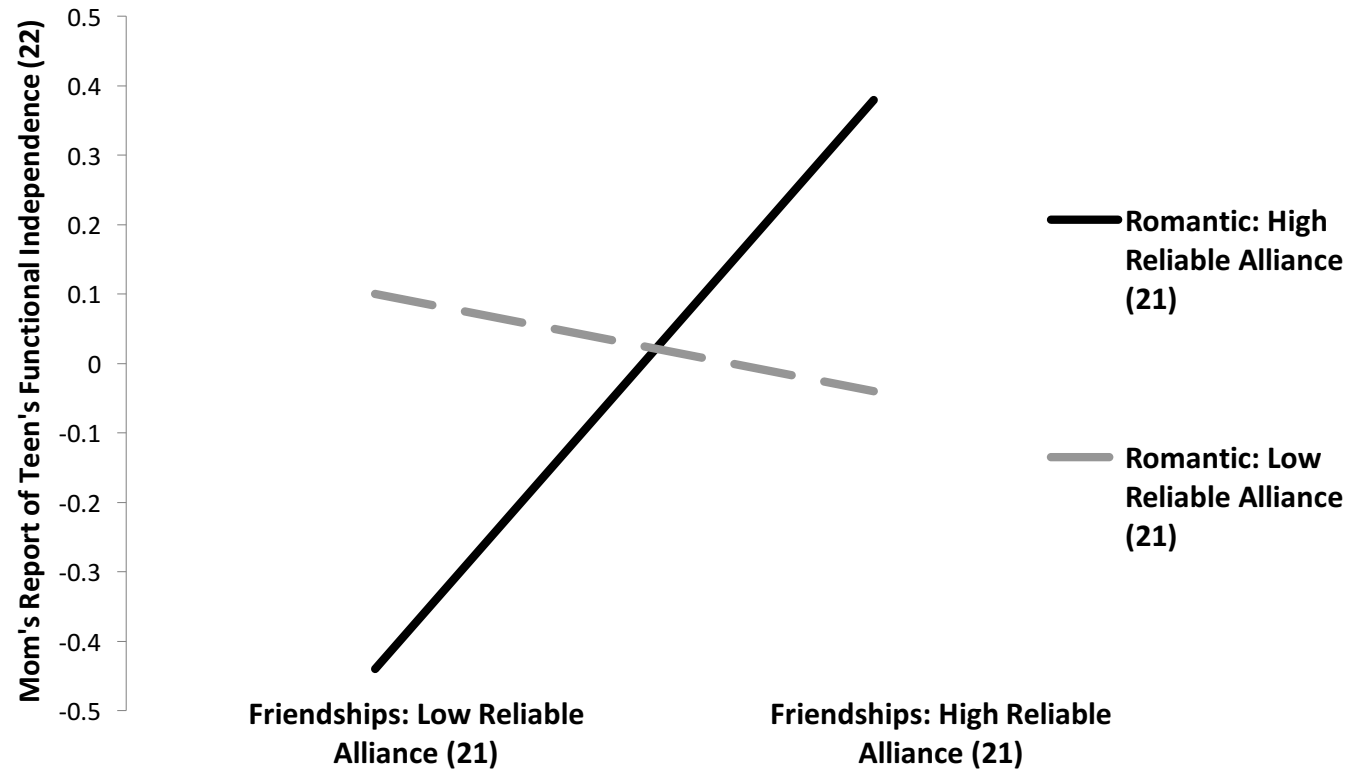
*Figure 11.* Interaction between reliable alliance in friendships (21) and reliable alliance in romantic relationships (21) predicting best friend's report of teen's workplace promotions (22). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



*Figure 12.* Interaction between reliable alliance in friendships (21) and reliable alliance in romantic relationships (21) predicting mom's report of teen's workplace performance (22). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT



*Figure 13.* Interaction between reliable alliance in friendships (21) and reliable alliance in romantic relationships (21) predicting mom's report of teen's functional independence (22). High and low values of the constructs represent scores 1 SD above and below the mean, respectively.

## EGO AND INTIMACY PREDICTING SOCIAL DEVELOPMENT